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Magic Quadrant for Business Intelligence and Analytics Platforms

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VIEW SUMMARY

Traditional BI market share leaders are being disrupted by platforms that expand access to analytics and deliver higher business value. BI leaders should track how traditionalists translate their forward-looking product investments into renewed momentum and an improved customer experience.

Market Definition/Description

This document was revised on 22 May 2015. The document you are viewing is the corrected version. For more information, see the Corrections page on gartner.com.

BI and Analytics Platform Capabilities Definition

The BI and analytics platform market is undergoing a fundamental shift. During the past ten years, BI platform investments have largely been in IT-led consolidation and standardization projects for large-scale systems-of-record reporting. These have tended to be highly governed and centralized, where IT-authored production reports were pushed out to inform a broad array of information consumers and analysts. Now, a wider range of business users are demanding access to interactive styles of analysis and insights from advanced analytics, without requiring them to have IT or data science skills. As demand from business users for pervasive access to data discovery capabilities grows, IT wants to deliver on this requirement without sacrificing governance.

While the need for system-of-record reporting to run businesses remains, there is a significant change in how companies are satisfying these and new business-user-driven requirements. They are increasingly shifting from using the installed base, traditional, IT-centric platforms that are the enterprise standard, to more decentralized data discovery deployments that are now spreading across the enterprise. The transition is to platforms that can be rapidly implemented and can be used by either analysts and business users, to find insights quickly, or by IT to quickly build analytics content to meet business requirements to deliver more timely business benefits. Gartner estimates that more than half of net new purchasing is data-discovery-driven (see "Market Trends: Business Intelligence Tipping Points Herald a New Era of Analytics"). This shift to a decentralized model that is empowering more business users also drives the need for a governed data discovery approach.

This is a continuation of a six-year trend, where the installed-base, IT-centric platforms are routinely being complemented, and in 2014, they were increasingly displaced for new deployments and projects with business-user-driven data discovery and interactive analysis techniques. This is also increasing IT's concerns and requirements around governance as deployments grow. Making analytics more accessible and pervasive to a broader range of users and use cases is the primary goal of organizations making this transition.

Traditional BI platform vendors have tried very hard to meet the needs of the current market by delivering their own business-user-driven data discovery capabilities and enticing adoption through bundling and integration with the rest of their stack. However, their offerings have been pale imitations of the successful data discovery specialists (the gold standard being Tableau) and as a result, have had limited adoption to date. Their investments in next-generation data discovery capabilities have the potential to differentiate them and spur adoption, but these offerings are works in progress (for example, SAP Lumira and IBM Watson Analytics).

Also, in support of wider user adoption, companies and independent software vendors are increasingly embedding traditional reporting, dashboards and interactive analysis into business processes or applications. They are also incorporating more advanced and prescriptive analytics built from statistical functions and algorithms available within the BI platform into analytics applications. This will deliver insights to a broader range of analytics users that lack advanced analytics skills.

As companies implement a more decentralized and bimodal governed data discovery approach to BI, business users and analysts are also demanding access to self-service capabilities beyond data discovery and interactive visualization of IT-curated data sources. This includes access to sophisticated, yet business-user-accessible, data preparation tools. Business users are also looking for easier and faster ways to discover relevant patterns and insights in data. In response, BI and analytics vendors are introducing self-service data preparation (along with a number of startups such as ClearStory Data, Paxata, Trifacta and Tamr), and smart data discovery and pattern detection capabilities (also an area for startups such as

ADDITIONAL PERSPECTIVES

Industry: Insurance

STRATEGIC PLANNING ASSUMPTIONS

By 2018, data discovery and data management evolution will drive most organizations to augment centralized analytic architectures with decentralized approaches.

By 2017, most data discovery tools will have incorporated smart data discovery capabilities to expand the reach of interactive analysis.

By 2017, most business users and analysts in organizations will have access to self-service tools to prepare data for analysis.

By 2017, most business intelligence and analytics platforms will natively support multistructured data and analysis.

Through 2016, less than 10% of self-service business intelligence initiatives will be governed sufficiently to prevent inconsistencies that adversely affect the business.

ACRONYM KEY AND GLOSSARY TERMS

AWS	Amazon Web Services
BI	business intelligence
CPG	consumer packaged goods
CPM	corporate performance management
ETL	extraction, transformation and loading
HDFS	Hadoop Distributed File System
IoT	Internet of Things
KPI	key performance indicator
LOB	line of business
MDX	Multidimensional Expressions
OLAP	online analytical processing
SMB	small or midsize business

EVIDENCE

[1] Gartner defines total software revenue as revenue that is generated from appliances, new licenses, updates, subscriptions and hosting, technical support, and maintenance. Professional services revenue and hardware revenue are not included in total software revenue (see "Market Share Analysis: Business Intelligence and Analytics Software, 2013").

Gartner's analysts, the ratings and commentary in this

BeyondCore and DataRPM) to address these emerging requirements and to create differentiation in the market. The intent is to expand the use of analytics, particularly insight from advanced analytics, to a broad range of consumers and nontraditional BI users — increasingly on mobile devices and deployed in the cloud.

Interest in cloud BI declined slightly during 2014, to 42% compared with last year's 45% — of customer survey respondents reporting they either are (28%) or are planning to deploy (14%) BI in some form of private, public or hybrid cloud. The interest continued to lean toward private cloud and comes primarily from those lines of business (LOBs) where data for analysis is already in the cloud. As data gravity shifts to the cloud and interest in deploying BI in the cloud expands, new market entrants such as Salesforce Analytics Cloud, cloud BI startups and cloud BI offerings from on-premises vendors are emerging to meet this demand and offer more options to buyers of BI and analytics platforms. While most BI vendors now have a cloud strategy, many leaders of BI and analytics initiatives do not have a strategy for how to combine and integrate cloud services with their on-premises capabilities.

Moreover, companies are increasingly building analytics applications, leveraging a range of new multistructured data sources that are both internal and external to the enterprise and stored in the cloud and on-premises to conduct new types of analysis, such as location analytics, sentiment and graph analytics. The demand for native access to multistructured and streaming data combined with interactive visualization and exploration capabilities comes mostly from early adopters, but are becoming increasingly important platform features.

As a result of the market dynamics discussed above, for this Magic Quadrant, Gartner defines BI and analytics as a software platform that delivers 13 critical capabilities across three categories — enable, produce and consume — in support of four use cases for BI and analytics. These capabilities support building an analytics portfolio that maps to shifting requirements from IT to the business. From delivery of insights to the analytics consumer, through an information portal often deployed centrally by IT, to an analytics workbench used by analysts requiring interactive and smart data exploration (see "How to Architect the BI and Analytics Platform"), these capabilities enable BI leaders to support a range of functions and use cases from system-of-record reporting and analytic applications to decentralized self-service data discovery. A data science lab would be an additional component of an analytics portfolio. Predictive and prescriptive analytics platform capabilities and vendors are covered in the "Magic Quadrant for Advanced Analytics Platforms."

See Note 1 for how capability definitions in this year's Magic Quadrant have been modified from last year to reflect our current view of the critical capabilities for BI and analytics platforms.

The 13 Critical Capabilities and Use Cases

Vendors are assessed for their support of four main use cases:

1. Centralized BI Provisioning: Supports a workflow from data to IT-delivered-and-managed content.
2. Decentralized Analytics: Supports a workflow from data to self-service analytics.
3. Governed Data Discovery: Supports a workflow from data to self-service analytics to systems-of-record, IT-managed content with governance, reusability and promotability.
4. OEM/Embedded BI: Supports a workflow from data to embedded BI content in a process or application.

Vendors are also assessed according to the following 13 critical capabilities. Subcriteria for each are listed in Note 2. How well Magic Quadrant Leaders' and Challengers' platforms support these critical capabilities is explored in greater detail in the "Critical Capabilities for BI and Analytics Platforms" (to be published shortly).

BI and Analytics Platform Capabilities for 2015

Enable

Business User Data Mashup and Modeling: "Drag and drop," user-driven data combination of different sources and the creation of analytic models such as user-defined measures, sets, groups and hierarchies. Advanced capabilities include semantic autodiscovery, intelligent joins, intelligent profiling, hierarchy generation, data lineage and data blending on varied data sources, including multistructured data.

Internal Platform Integration: A common look and feel, install, query engine, shared metadata, promotability across all platform components.

BI Platform Administration: Capabilities that enable securing and administering users, scaling the platform, optimizing performance and ensuring high availability and disaster recovery. These capabilities should be common across all platform components.

Metadata Management: Tools for enabling users to leverage the same systems-of-record semantic model and metadata. They should provide a robust and centralized way for administrators to search, capture, store, reuse and publish metadata objects, such as dimensions, hierarchies, measures, performance metrics/KPIs, and report layout objects, parameters and so on. Administrators should have the ability to promote a business-user-defined data mashup and metadata to the systems-of-record metadata.

Cloud Deployment: Platform as a service and analytic application as a service capabilities for building, deploying and managing analytics and analytic applications in the cloud, based on data both in the cloud and on-premises.

Development and Integration: The platform should provide a set of programmatic and visual tools and a development workbench for building reports, dashboards, queries and analysis. It should enable scalable and personalized distribution, scheduling and alerts, and workflow of BI and analytics content and applications via email, to a portal or to mobile devices. It should include the ability to embed and customize BI platform components in a business process, application or portal.

NOTE 1
CHANGE IN CAPABILITIES DEFINITIONS FROM LAST YEAR'S MAGIC QUADRANT

Capabilities dropped/changed:

Microsoft Office integration was dropped as a stand-alone critical capability. It is factored into subcriteria for IT Developed Reporting and Dashboards (Produce)
Geospatial and Location Intelligence is now a subcriteria for Analytics Dashboards and Content (Produce)
Support for Big Data Sources is now included as a subcriteria of Development and Integration (Enable)
OLAP and Adhoc Query and Reporting are now subcriteria of Traditional Styles of Analysis (Produce)
Embedded Advanced Analytics is now a subcriteria of Analytics Dashboards and Content (Produce)
Embeddable Analytics is now Embedded BI (Consume)
Search-Based Data Discovery is now a subcriteria of Free-form Data Exploration (Produce)
Interactive Visualization is now subcriteria of Analytics Dashboards and Content and Free-form Data Exploration (Produce)
We have created two capabilities for dashboards: Analytics Dashboards and Content and IT Developed Reports and Dashboards, to differentiate between business-user-driven and free-form interactive dashboards and those that are IT-defined.
Reporting is now part of IT Developer Reports and Dashboards.

Capabilities Added:

Cloud Deployment

NOTE 2
DETAILED CAPABILITIES SUBCRITERIA

Business User Data Mashup and Modeling: "Drag and drop," user-driven data combination of different sources and the creation of analytic models, such as user-defined measures, sets, groups and hierarchies. Advanced capabilities include semantic autodiscovery, intelligent joins, intelligent profiling, hierarchy generation, data lineage and data blending on varied data sources, including multistructured data.

Business user data mashup and joins
Business-user-defined calculations, grouping
Data inference
Data profiling and enrichment
Business user data lineage

Internal Platform Integration: A common look and feel, install, query engine, shared metadata, promotability across all platform components.

Integration with complementary BI capabilities
Ability to promote business-user-generated data mashups to the systems of record
Common security model and administration application components across the platform
Integrated semantic/metadata layer
Integrated and common front-end tools

BI Platform Administration: Capabilities that enable securing and administering users, scaling the platform, optimizing performance and ensuring high availability and disaster recovery. These capabilities should be common across all platform components.

Architecture
Security
User administration
Scalability and performance
High availability and disaster recovery

Produce

Free-Form Interactive Exploration: Enables the exploration of data via the manipulation of chart images, with the color, brightness, size, shape and motion of visual objects representing aspects of the dataset being analyzed. This includes an array of visualization options that go beyond those of pie, bar and line charts, including heat and tree maps, geographic maps, scatter plots and other special-purpose visuals. These tools enable users to analyze the data by interacting directly with a visual representation of it.

Analytic Dashboards and Content: The ability to create highly interactive dashboards and content with visual exploration and embedded advanced and geospatial analytics to be consumed by others.

IT-Developed Reporting and Dashboards: Provides the ability to create highly formatted, print-ready and interactive reports, with or without parameters. IT-authored or centrally authored dashboards are a style of reporting that graphically depicts performance measures. This includes the ability to publish multiobject, linked reports and parameters with intuitive and interactive displays; dashboards often employ visualization components such as gauges, sliders, checkboxes and maps, and are often used to show the actual value of the measure compared with a goal or target value. Dashboards can represent operational or strategic information.

Traditional Styles of Analysis: Ad hoc query enables users to ask their own questions of the data, without relying on IT to create a report. In particular, the tools must have a reusable semantic layer to enable users to navigate available data sources, predefined metrics, hierarchies and so on. Online analytical processing (OLAP) enables users to analyze data with fast query and calculation performance, enabling a style of analysis known as "slicing and dicing." Users are able to navigate multidimensional drill paths. They also have the ability to write-back values to a database for planning and "what if?" modeling. This capability could span a variety of data architectures (such as relational, multidimensional or hybrid) and storage architectures (such as disk-based or in-memory).

Consume

Mobile: Enables organizations to develop and deliver content to mobile devices in a publishing and/or interactive mode, and takes advantage of mobile devices' native capabilities, such as touchscreen, camera, location awareness and natural-language query.

Collaboration and Social Integration: Enables users to share and discuss information, analysis, analytic content and decisions via discussion threads, chat, annotations and storytelling.

Embedded BI: Capabilities — including a software developer's kit with APIs and support for open standards — for creating and modifying analytic content, visualizations and applications, and embedding them into a business process and/or an application or portal. These capabilities can reside outside the application, reusing the analytic infrastructure, but must be easily and seamlessly accessible from inside the application, without forcing users to switch between systems. The capabilities for integrating BI and analytics with the application architecture will enable users to choose where in the business process the analytics should be embedded.

Magic Quadrant

Figure 1. Magic Quadrant for Business Intelligence and Analytics Platforms

Metadata Management: Tools for enabling users to leverage the same systems-of-record semantic model and metadata. They should provide a robust and centralized way for administrators to search, capture, store, reuse and publish metadata objects, such as dimensions, hierarchies, measures, performance metrics/key performance indicators (KPIs), and report layout objects, parameters and so on. Administrators should have the ability to promote a business-user-defined data mashup and metadata to the systems-of-record metadata.

Promotability
Data modeling
Reuse
Connectivity and data sources
Data lineage and impact analysis

Cloud Deployment: Platform-as-a-service and analytic-application-as-a-service capabilities for building, deploying and managing analytics and analytic applications in the cloud based on data both in the cloud and on-premises.

Built-in data management capabilities (including data integration and data warehouse)
Special-purpose connectors to cloud-based data sources
Direct connect for both cloud and on-premises data sources (hybrid)
Packaged content
Self-service administration
Self-service elasticity

Development and Integration: The platform should provide a set of programmatic and visual tools and a development workbench for building reports, dashboards, queries and analysis. It should enable scalable and personalized distribution, scheduling and alerts and workflow of BI and analytics content and applications via email, to a portal or to mobile devices. It should include the ability to embed and customize BI platform components in a business process, application or portal.

External platform integration
Embeddable/embedded BI and analytics
Support for big data sources (including cloud)
Developer productivity (APIs, SDKs, versioning, multideveloper features)
Scheduling and alerts
Workflow and events

Free Form Interactive Exploration: Enables the exploration of data via the manipulation of chart images, with the color, brightness, size, shape and motion of visual objects representing aspects of the dataset being analyzed. This includes an array of visualization options that go beyond those of pie, bar and line charts, including heat and tree maps, geographic maps, scatter plots and other special-purpose visuals. These tools enable users to analyze the data by interacting directly with a visual representation of it.

Interactivity and exploration
User experience
Information visualizations
Disconnected exploration
Search-based data discovery
Data flow
Content authoring
In-memory interactive analysis

Analytic Dashboards & Content: The ability to create highly interactive dashboards and content with visual exploration and embedded advanced and geospatial analytics to be consumed by others.

Information visualizations
Disconnected exploration
Embedded advanced analytics
Geospatial and location intelligence
Content authoring
Consumer interactivity and exploration

IT-Developed Reporting and Dashboards: Provides the ability to create highly formatted, print-ready and interactive reports, with or without parameters. IT or centrally authored dashboards are a style of reporting that graphically depicts performances measures. Includes the ability to publish multiobject, linked reports and parameters with intuitive and interactive displays; dashboards often employ visualization components such as gauges, sliders, checkboxes and maps, and are often used to show the actual value of the measure compared to a goal or target value. Dashboards can represent operational or strategic information.

CHALLENGERS | LEADERS

- Tableau
- Qlik
- Birst
- Microsoft
- Logi Analytics
- MicroStrategy — SAS
- Information Builders — Oracle — IBM — SAP
- Tibco Software
- GoodData
- Pyramid Analytics — Prognoz
- Targit — Pentaho
- Board International — Yellowfin
- Datawatch
- Alteryx
- Panorama Software
- Salient Management Company
- OpenText (Actuate)

ABILITY TO EXECUTE

NICHE PLAYERS | VISIONARIES

COMPLETENESS OF VISION →

As of February 2015

Source: Gartner (February 2015)

Overview of Magic Quadrant Positioning

The vendors' positions in this Magic Quadrant reflect the current market transition.

The year 2014 has been another year of challenging execution for the market share leaders in the BI and analytics market, juxtaposed against strong execution by the data discovery vendors that are satisfying customers, meeting their buying requirements and delivering greater business value. Growing business user requirements for ease of use, support for users to conduct complex types of analysis, and a fast time to business benefits are not being well met by vendors that own the large, IT-centric installed base market share. Customers of IT-centric platforms that have a broad range of BI platform capabilities report using them narrowly, most often for production reporting. On the other hand, business-centric platforms such as Tableau, Qlik and other emerging vendors have a more narrow set of capabilities, but are used more broadly for a range of BI and analytics functions — including for reporting, for which they are not optimally suited, and for expanding use cases — primarily because they are easy to use and deploy.

The current BI and analytics market situation looks similar to the mainframe/workstation market in the late 1980s, which had a complete shift in requirements and buyers. For example, these shifts drove HP to a complete rethink and redesign of its computing platform strategy and architecture. Ultimately this market shift in requirements and buyers wiped out DEC, since it was not effective in adapting to the shift. The market share leaders in the BI and analytics market are now at a similar crossroads.

While data discovery platforms predominantly complement IT-centric systems-of-record deployments, they are being used for much of the new analytics project investments. The result has been increased marginalization of the installed-base vendors, which without competitive offerings have fewer opportunities for expanded growth.

Displacement of the incumbents by Tableau, Qlik and others are increasing in pockets, particularly in SMBs, although this trend is not yet mainstream. Gartner inquiries and survey data suggest that, increasingly, companies would like to expand their use of, and even standardize on, data discovery platforms for their larger enterprise BI deployments, but find that in many cases these platforms lack the necessary enterprise features in relation to governance, administration and scalability (among other things). The data discovery vendors continue to invest in capabilities to reverse these limitations.

If we begin to see large-scale displacements by these and other business-user-centric vendors, the market shift will be complete (see "Market Trends: The Collision of Data Discovery and Business Intelligence Will Cause Destruction"). Right now, the majority of buyers seem to be waiting to see if their enterprise-standard BI platform will deliver on the business-user-oriented capabilities they prefer to use to meet new analytics requirements beyond production reporting. The existence of separate systems-of-record reporting platforms and data discovery platforms can pose challenges for organizations attempting to govern, scale and support these different environments and pace layers (see "Applying Gartner's Pace Layer Model to Business Analytics"), with no single vendor fully addressing both.

Production reporting, distribution and printing
Parameterizations, filters, prompts
Report and dashboard navigation and guided navigation
Design environment and document layout
Visual components, such as gauges, sliders, dials, check boxes

Traditional Styles of Analysis: Ad hoc query enables users to ask their own questions of the data, without relying on IT to create a report. In particular, the tools must have a reusable semantic layer to enable users to navigate available data sources, predefined metrics, hierarchies and so on. OLAP enables users to analyze data with fast query and calculation performance, enabling a style of analysis known as "slicing and dicing." Users are able to navigate multidimensional drill paths. They also have the ability to write-back values to a database for planning and "what if?" modeling. This capability could span a variety of data architectures (such as relational, multidimensional or hybrid) and storage architectures (such as disk-based or in-memory).

OLAP
Ad hoc query

Mobile: Enables organizations to develop and deliver content to mobile devices in a publishing and/or interactive mode, and takes advantage of mobile devices' native capabilities, such as touchscreen, camera, location awareness and natural-language query.

Content authoring and information exploration
Information display, interaction and context awareness
Multidevice support
Security and administration
Offline mode exploration

Collaboration and Social Integration: Enables users to share and discuss information, analysis, analytic content and decisions via discussion threads, chat, annotations and storytelling.

Story telling
Discussion threads
Integration with social platforms
Timelines
Sharing and real-time collaboration

Embedded BI: Capabilities including a software developer's kit with APIs and support for open standards for creating and modifying analytic content, visualizations and applications, embedding them into a business process, and/or an application or portal. These capabilities can reside outside the application, reusing the analytic infrastructure, but must be easily and seamlessly accessible from inside the application, without forcing users to switch between systems. The capabilities for integrating BI and analytics with the application architecture will enable users to choose where in the business process the analytics should be embedded.

Capabilities for embedding (APIs, open standards, SDKs, component libraries)
Capabilities to consume common analytics methods, such as Predictive Model Markup Language (PMML) and R-based models in the metadata layer and/or in a report object or analysis

NOTE 3
CUSTOMER SURVEY METRICS
REFERENCED IN THIS REPORT

Magic Quadrant customer survey composite success measures are referenced throughout the report. Customer survey participants scored vendors on each metric on a scale of 1 to 7 (where 1 to 2 = poor, 3 to 5 = average, and 6 to 7 = outstanding).

Below is a reference for how these composite metrics are calculated:

Customer Experience: This is a combined score consisting of rating for product quality, support, availability of skills, user enablement (which includes scores for training, online videos, online communities and documentation) and migration difficulty.
Sales Experience: Customers rate their satisfaction with presales, contracting, pricing and account management.
Market Understanding: This is a composite measure of ease of use for consumers, ease of use for developers, ease of use for administration and

It is very likely that 2015 will be a critical year in which democratizing access to analytics will continue to dominate market requirements and stress the need for governance. Next-generation data discovery capabilities that leverage advanced analytics, but hide its complexity to simplify business user data preparation and automate pattern exploration, are likely to be more important enablers. The extent to which these emerging capabilities and trends impact buying in 2015 and beyond will determine which existing and new vendors emerge from this market transition as market leaders.

The need for platforms to scale and perform for larger amounts of diverse data will also continue to dominate BI market requirements. At the same time, the ability to bridge decentralized business-user-led analytics deployments with those centralized to serve the enterprise will be a crucial ongoing challenge for IT and BI vendors. With the added complexities introduced by new data sources (such as the cloud, real-time streaming events and sensors, and multistructured data) and new types of analysis (such as link/network and sentiment analysis, and new algorithms for machine learning), new challenges and opportunities will emerge to integrate, govern and leverage these new sources to build business value. Leaders of BI initiatives will be under pressure to identify and optimize these opportunities and to deliver results faster than ever before.

This document presents a global view of Gartner's opinion of the main software vendors that should be considered by organizations seeking to use BI and analytics platforms to develop BI applications. Buyers should evaluate vendors in all four quadrants and not assume that only the Leaders can deliver successful BI implementations. Year-over-year comparisons of vendors' positions are not particularly useful, given the market's dynamics (such as emerging competitors, new product road maps and new buying centers); also, clients' concerns have changed since our last Magic Quadrant, particularly since we are in the middle of a significant shift in this market. It is also important to avoid the natural tendency to ascribe your personal definitions for Completeness of Vision and Ability to Execute to this Magic Quadrant. For the purposes of evaluation in this Magic Quadrant, the measures are very specific and likely to be broader than the axis titles may imply at first glance. Readers are encouraged to look at the Evaluation Criteria and Vendor Strengths and Cautions sections carefully to fully understand the nuances of vendor placement that may not be apparent in the Magic Quadrant graphic. For guidance on the Magic Quadrant evaluation process and on how to use a Magic Quadrant, see "How Markets and Vendors Are Evaluated in Gartner Magic Quadrants."

Gartner surveyed 2,083 users of BI platforms as part of the research for this report. Vendors are assessed on a number of key customer survey metrics referred to throughout this report (see Note 3 for how these are calculated). For a detailed explanation of vendor positioning, please see the Vendor Strengths and Cautions section and the Quadrant Descriptions section in this document.

A more detailed assessment of product capabilities for vendors positioned in the Leader's and Challenger's quadrant (as well as those vendors that were in the Leader's quadrant last year) are included in the forthcoming "Critical Capabilities for BI and Analytics Platforms."

Vendor Strengths and Cautions

Alteryx

The Alteryx platform offers a subscription-based analytics platform targeted at business users. Alteryx's tools include easy-to-use advanced data preparation capabilities, location analytics and extensive integration with the R analytics ecosystem.

Alteryx maintains its position in the Visionaries quadrant due to its ability to support business users with an integrated set of intuitive tools for data preparation, embedded advanced analytics and application sharing as well as deep geospatial analytics. Instead of being one more reporting and dashboard tool in the BI space, this vendor takes a unique approach to the market — broadening the range of users capable of developing analytic processes.

Strengths

Self-service data preparation is a platform strength, with 54% of Alteryx customers using the platform for this purpose. It earned the top product score for this capability. Embedded BI, including embedded advanced analytics, is another platform strength. Recognizing the benefits of this approach, customers have awarded Alteryx the highest scores for market understanding (ease of use, complexity of analysis and breadth of use — see Note 3), with a wide gap to the second-best vendor. The platform is also able to integrate with Tableau and Qlik, which complement Alteryx by providing the interactive visualization capabilities missing in its own portfolio. It's a win-win situation, because Alteryx in turn fills the gaps in data preparation and analytics features for Tableau and Qlik. Alteryx has been able to leverage these partnerships, participating in joint events and marketing activities — which greatly appeals to its customers. Cloudera (for Hadoop), Databricks (for Spark) and Revolution Analytics (for R), recently acquired by Microsoft, are other examples of close partners supporting a range of expanding capabilities in the big data analytics space. Consulting and system integration companies such as Accenture, Amdocs, BCG, Deloitte and KPMG are also starting to deploy Alteryx in their customer bases.

Alteryx's platform earns the third-highest score for ease of use for content creation, but still has the greatest ability to solve complex questions (according to the customer survey for this Magic Quadrant). Ease of use is also reflected in a faster-than-average report development time of only 2.1 days — a result in the top three (for fastest report development times) in this Magic Quadrant.

Alteryx's customers are generally happy with the platform, with 60% reporting no problems with the tool and 46% of those surveyed reporting no limitations to its expansion in the organization (both these results are above the survey average). The platform achieved the second-best scores for performance, at run time. Customers also rate Alteryx in the top three vendors (for this Magic Quadrant) in terms of achieving business benefits. These experiences contributed to customers' positive view of Alteryx's future.

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deployment, complexity of analysis (described below) breadth of use (this measures the range of analytic activities for which the platform is used). We believe these three measures map to current buying requirements.

Complexity of Analysis: This is a weighted average score based on the percentage of respondents reporting use of the platform score for the types of analysis users conduct with the platform — more interactive and advanced types of analysis result in a higher score than static or parameterized reporting. Activities are weighted as follows:

    Viewing static reports = 1
    Monitoring performance via a scorecard = 1
    Viewing parameterized reports = 2
    Doing simple ad hoc analysis = 3
    Interactive exploration and analysis of data = 4
    Doing moderately complex to complex ad hoc analysis = 5
    Using predictive analytics and/or data mining models = 5

User Enablement: This is a composite score consisting of individual ratings for documentation, online tutorials for content authors, online tutorials for consumers, online communities, training, availability of skills and user conferences.

Business Benefits: The business benefits score is an average of scores on 11 different benefit areas as follows:

    Increased revenue
    Better, faster decisions
    Business benefits: customer satisfaction
    Reduce IT head count
    Reduce LOB head count
    Reduce external IT costs
    Reduce other non-IT costs
    Expand types of analysis
    Make better insights available to more people
    Link KPIs to corporate objectives
    Monetize data

EVALUATION CRITERIA DEFINITIONS

Ability to Execute

Product/Service: Core goods and services offered by the vendor for the defined market. This includes current product/service capabilities, quality, feature sets, skills and so on, whether offered natively or through OEM agreements/partnerships as defined in the market definition and detailed in the subcriteria.

Overall Viability: Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood that the individual business unit will continue investing in the product, will continue offering the product and will advance the state of the art within the organization's portfolio of products.

Sales Execution/Pricing: The vendor's capabilities in all presales activities and the structure that supports them. This includes deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel.

Market Responsiveness/Record: Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness.

Marketing Execution: The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional initiatives, thought leadership, word of mouth and sales activities.

Customer Experience: Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements and so on.

Operations: The ability of the organization to meet its goals and commitments. Factors include the quality

Cautions

Alteryx is primarily used in decentralized BI deployments and does not support a centralized BI use case — putting it among the lowest percentage for customers using the platform in this way. Only Datawatch and GoodData customers report lower percentages of centralized deployments. It also supports the lowest number of users, with only 55 on average. This confirms the use of Alteryx as a point solution for analytics at the departmental level. It should, therefore, be deployed as a complement to other tools within an organization.

The platform excels in some capabilities (as identified above), but has also clear limitations in areas such as reporting, dashboards, mobile — BI content visualization and delivery in general, plus metadata management and BI platform administration. These gaps serve to highlight its best fit as a complement to other tools.

Cost of the platform is a barrier to its adoption, with 34% of customers identifying this as a limitation to further expansion. This could become an issue as other tools with better price points (namely in the data discovery space) gain more advanced capabilities for data preparation and analytics — closing Alteryx's window of opportunity. We should, however, recognize that this is a major improvement over last year's results — when 67% of customers identified cost as a limitation to further expansion.

Although increasingly supported by the partner networks of Tableau and Qlik, Alteryx still lacks a wide geographic presence; it has coverage in North America, a limited presence in Europe and exploratory moves and partnerships into other regions. The company is investing to overcome this challenge and will continue to expand its geographic presence through indirect channels, building on the current network of partners present in 60 countries.

Birst

Birst has defined the pioneering vision of what a set of cloud BI and analytics capabilities should look like. It has a unique two-tier data architecture coupled with a BI and analytics platform and allows customers to keep their data on-premises if they so choose.

Birst is a Challenger in this Magic Quadrant, primarily because of its product strategy and innovations and because it has adapted its strategy, organization and focus as the market for cloud BI has evolved. It has grown the business at a good pace in execution/delivery and customer satisfaction.

Strengths

Birst's two-tier architecture — which plugs into existing data warehouses, data lakes or applications — automates the process of refining the data and creating a more unified model/view of the data, and adds a BI layer for business users' analytics needs. Birst offers an appliance with the same code base as the cloud offering — for those customers that want to take advantage of its product strengths but prefer a private cloud. Unlike most other cloud-only players, with Birst a customer's application data can be left on-premises in the "Birst Live Access" mode, while a BI/analytics application (using the data) runs in the Birst cloud. Customers report that 59% of their data comes from cloud sources — the highest of any vendor in this Magic Quadrant. Only GoodData, the other pure-play cloud vendor, comes close with 52%.

Birst scores well for a centralized BI use case, with core product strengths in cloud deployment, BI platform administration, development and integration, embedded BI, metadata management, IT-developed reports and dashboards, and traditional styles of analysis.

Birst is rated as easy to integrate and use. A short development time for fairly complex reports and analysis is cited by customers. Birst has among the highest integration scores (both within and external to the platform) and also scored high on ease and breadth of use. Customers report high achievement of business benefits. Many customers are using Birst's predefined, vertically specific BI applications (for example, Birst Sales Analytics Solution Accelerator, Birst for Insurance, Birst for Usage Analytics), which help accelerate time to value and business benefits.

Operational execution is a key strength and Birst has among the highest customer experience (see Note 3) scores in this Magic Quadrant. Birst is the only BI vendor with a chief customer officer who is responsible for developing best practices and working with customers from the onset of an engagement to ensure their success. Every two weeks, Birst hosts "Office Hours" for its customers via a Web meeting; any customer can join to discuss product usage and best practices.

Birst has a broad range of technology provider partnerships and integrations with companies such as SAP, Amazon, NetSuite, Salesforce and Informatica, and more recently with Tableau.

Cautions

Birst scored well overall in product functionality, but its main product limitations are around the lack of adoption/penetration of its data discovery and mobile capabilities. Collaboration capabilities are also an area where it will need to increase its level of innovation to competitively meet business user requirements.

Survey data for cloud BI (for this Magic Quadrant) shows that the primary interest (and investment) is in hybrid and private cloud offerings. Birst has generally been viewed as more of a pure-play public cloud BI/analytics company, with limited support for private clouds, and little awareness of its appliance offering. It needs to reposition itself to be viewed as a general-purpose BI/analytics platform rather than as a specialty cloud vendor.

Large software vendors such as MicroStrategy, Oracle, IBM, SAP and Salesforce are entering the market with their own cloud BI/analytics services and could bring additional pricing and competitive pressures to pure-plays such as Birst.

Birst is not the incumbent platform in most of its customers' companies. Most large organizations have extensive investments in BI/analytics infrastructure and tools. Birst is still most often deployed departmentally, and must successfully position itself as a complement to the enterprise standard.

Birst is primarily focused on North America and Northern Europe, but has expansion plans —

of the organizational structure, including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

Completeness of Vision

Market Understanding: Ability of the vendor to understand buyers' wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen to and understand buyers' wants and needs, and can shape or enhance those with their added vision.

Marketing Strategy: A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the website, advertising, customer programs and positioning statements.

Sales Strategy: The strategy for selling products that uses the appropriate network of direct and indirect sales, marketing, service, and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

Offering (Product) Strategy: The vendor's approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature sets as they map to current and future requirements.

Business Model: The soundness and logic of the vendor's underlying business proposition.

Vertical/Industry Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including vertical markets.

Innovation: Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.

Geographic Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries as appropriate for that geography and market.

including ecosystem partners for the international market. However, these plans are currently a strategic "work in progress" compared with the Leaders in this Magic Quadrant.

Board International

Board delivers a single, integrated platform, which provides programming-free BI, analytics and corporate performance management (CPM) capabilities. The focus is to deliver a central, unified and consistent information platform as a basis for BI and performance management applications. Europe is Board's main market and it has subsidiaries in Europe, North America and Asia/Pacific, and supports clients in South America though partners.

Board is positioned as a Niche Player in this Magic Quadrant. (It is also part of the Magic Quadrant for CPM suites, where it was positioned as a Visionary player in 2014). It serves the submarket for unified BI and CPM platforms, which are centralized and mostly IT-driven deployments. Board is well-positioned in this submarket and has achieved strong growth for several consecutive years.

Strengths

The predominant reasons for selecting Board are in line with the overall survey results with respect to the top selection criteria: 31% of survey respondents selected ease of use for developers and ease of use for end users as important selection criteria, followed by 19% of respondents selecting functionality as an important criterion.

Board achieved above-average scores across the three criteria for ease of use — for content creation, for end users and for administration and implementation. Board is also in the top quartile for shortest report development times. Survey respondents also rate Board as above average for achievement of business benefits.

Board's customers show a very high level of loyalty and it achieved the highest score overall, with 98% of customers indicating that they have no plans to discontinue the relationship. This is further supported by about 90% of the respondents reporting that they either have a positive view of Board's future or their view has changed to a positive outlook during the past year.

Board has continued to invest in new platform capabilities to improve performance, advanced analytics and mobile. The newly introduced Hybrid Bitwise Memory Pattern (HBMP) will further improve the performance of the platform and enable a hybrid in-memory architecture for performance optimization. Board has also started to deliver predictive analytics through its proprietary Board Enterprise Analytics Modeling (BEAM) for statistical forecasting and other statistical functions. Currently, Board does not support R, but it does have native mobile support for iPad, Android and Microsoft tablets.

Board's product "sweet spot" is in its integrated CPM capabilities. The combination of BI and CPM capabilities is Board's key differentiator. It also scored well on IT-developed reports and dashboards, metadata management and free-form exploration, as well as on traditional styles of analysis.

Cautions

Board achieved scores that were slightly below average in all three support-related aspects (that is, support time to resolution, support response and support level of expertise). Respondents rated product quality with a score close to the overall average, which might be related to the migration score of "more difficult than average." Next to cost, support quality was often mentioned by survey respondents as a limitation. Prospective customers should pay attention to this during a proof of concept, in particular outside Board's core market in Europe.

Compared with last year, the average size of Board deployments grew significantly in both data volume accessed and number of end users. Despite this, Board is still in the lowest quartile for both deployment size and data volume — with 348 end users, on average, and 1.4TB of data. Prospective and existing customers with the intention to implement large deployments should perform scalability tests and check Board's references to ensure Board can handle their specific requirements.

Board is predominantly used for centralized BI use cases and on-premises deployments in smaller companies, and for departmental deployments. Board achieved the second-highest response percentage with respect to a centralized BI platform use case. It scored the second-lowest in enabling users to conduct complex types of analysis (see Note 3) — indicating a rather narrow utilization of analytic capabilities, with a focus on systems-of-record reporting. Consequently, Board achieved an overall market understanding score that was slightly below average.

Datawatch

Datawatch offers an interactive data discovery platform (desktop and server) specializing in visually analyzing streaming and multistructured data. It is based on a combination of technologies: Monarch, a mature product for structuring data from PDFs and semistructured and unstructured sources that was primarily used by customers to migrate, or otherwise leverage, data in legacy reports; and Panopticon (acquired 2013), a visual-based data discovery platform well-suited for real-time dashboards for analyzing streaming time series data in addition to historical data.

Datawatch entered this Magic Quadrant for the first time this year, in the Niche Players quadrant. Strong scores for customer experience and a differentiated product and vision for data discovery on real-time and multistructured data have contributed to its position.

Strengths

Datawatch offers interactive data discovery that is differentiated by its support for analyzing real-time streaming and time series data coming from messaging middleware, streaming infrastructure including Amazon Kinesis, and complex-event processing (CEP) engines including Tibco StreamBase, OneTick, OneTick CEP, Thomson Reuters Velocity Analytics and SAP Sybase ESP. An in-memory, OLAP-based StreamCube is associated with each graphical display object. The system processes new

data as it arrives, selects the subset of important data, recalculates the relevant sections of the model and refreshes the associated parts of the display immediately. In particular, the ability to compare real-time data with historical data is a differentiator from the other data discovery specialists — including Tibco Spotfire, which has a level of integration with Tibco StreamBase.

Customers report using the platform for more complex types of analysis than with most other vendors in this Magic Quadrant. Advanced geospatial and location intelligence capabilities in part contribute to users performing advanced types of analysis, particularly for real-time geospatial analysis. Customers report among the most narrow use of platform functionality, with a focus on interactive analysis. Datawatch registered the highest percentage of customers using its platform for interactive analysis. Customers also have an above-average perception of their overall customer experience (see Note 3), particularly in the areas of support and product quality.

Unlike both the data discovery specialists and the data discovery capabilities of IT-centric vendors, Datawatch's self-service data preparation capabilities, which leverage its Monarch technology, can access and structure semistructured and unstructured data such as JavaScript Object Notation (JSON), PDF and HTML as a data source for analysis, in addition to traditional and many big data sources. Scheduling and alerting capabilities are also more extensive than those available for Tableau, but require a degree of scripting.

A large percentage of customers use the product's software development kit (SDK) for embedding workbooks in other applications — Datawatch customers report the highest incidence, at 50%, of using the product either as an OEM or for embedded BI (versus an average of 27% for this Magic Quadrant). Most of the remaining customers use Datawatch in a decentralized deployment.

As a public company, Datawatch has more ready access to funding than a typical startup, albeit coupled with the less-forgiving pressure to meet Wall Street's expectations. Datawatch also has a seasoned management team (of ex-Cognos and TM1 executives), who have thus far positively steered its platform integration and go-to-market strategy toward differentiation in a growing area of the market. Datawatch has a large installed base in the financial services market and is expanding into other verticals. It is particularly well positioned for the emerging requirements around streaming data for the Internet of Things (IoT).

Cautions

Datawatch has limited awareness in an increasingly crowded market and has had difficulty in differentiating the platform against other data discovery platforms, outside of its core streaming data use cases. Moreover, Datawatch is in the process of building its sales force, partner program and geographic presence, but these go-to-market programs are more limited than those of its data discovery competitors. Enhancements to the product and product road map since acquisition, plus growing demand around requirements for the IoT, should improve Datawatch's competitive position with a broader range of buyers. However, customers report a below-average sales experience with Datawatch. Gartner inquiries also suggest a level of dissatisfaction in the legacy Monarch installed base as Datawatch transitions it to the new integrated platform.

Datawatch is primarily used departmentally, as a desktop product, with among the smallest average deployment size in terms of number of users of any vendor in this Magic Quadrant. While a server version is available for broader deployment, the platform's enterprise features are a work in progress, particularly in areas such as centralized BI administration and user monitoring capabilities, security, versioning, data lineage and impact analysis, and metadata management.

Customers rate Datawatch as less intuitive than other data discovery specialists, although the platform supports a full range of interactivity features and analyst-oriented data exploration capabilities. Moreover, unlike the other specialist data discovery tools that are primarily chosen for ease of use, the primary reason customers choose Datawatch is for its functionality and data access and integration.

Datawatch is not yet cloud-ready. Users can connect to cloud and big data sources, such as Amazon Kinesis, Amazon Redshift, Cloudant and MongoDB, but there are limited capabilities for deploying in the cloud. This is on the road map, however.

Datawatch has a smaller percentage of users deploying the product on mobile devices than most other vendors in the Magic Quadrant. The mobile capabilities support HTML5 interactivity only — no native applications — and do not support content authoring or offline analysis. Moreover, Datawatch is limited in its support for IT-developed reports and dashboards and traditional styles of analysis.

GoodData

GoodData is a cloud BI and analytics specialist, providing a comprehensive multitenant, cloud-only platform that includes data integration, a fully managed data warehouse repository, front-end BI tools and packaged applications. Its customers can also expect a broad range of data connectors — namely, to cloud-based data sources such as social media — and a vendor able to work directly with business users and support the full BI environment without much involvement from internal IT teams.

GoodData has a strong position in the Niche Players quadrant because it was early to the cloud BI market and has gained market traction in the deployment of embedded and digital marketing use cases as well as the integration of social media data sources.

Strengths

GoodData offers customers an end-to-end business analytics platform-as-a-service solution for data integration, data warehousing and BI, with above-average scores for breadth of use. By specializing in a cloud-only solution, GoodData is able to focus its efforts on the delivery and support of a tightly integrated offering to support rapid time to deployment. It receives high customer scores for its cohesive architecture, support time to resolution of problems and support expertise.

The platform's strengths include cloud deployment, BI platform administration, embedded BI, and development and integration capabilities. It receives among the top scores in the Magic Quadrant survey for the OEM/embedded use case. GoodData also has the highest percentage of customers

(many of whom are also cloud-based), of any vendor in this Magic Quadrant, that are embedding its solution.

Customers praise the software quality, with a score in the top three for this Magic Quadrant. Furthermore, although GoodData introduces new functionality quarterly, customers can count on an easy migration processes — as we would expect from a cloud-based solution where the vendor manages the full platform.

GoodData's average report development time is 3.1 days, faster than the average of 4.0 days for the vendors in this Magic Quadrant. The product is also easier to use than the average, with a user interface experience mostly intended for business users.

GoodData is a leader in the use of social media data sources, with 22% of customers using it for that purpose. Moreover, 51% of customers report the use of cloud-based data sources (the second best result for this Magic Quadrant), well ahead of the third vendor at 31%. This is not surprising since customers tend to be more open to cloud BI platforms when most of their data resides in the cloud. GoodData offers accelerator solutions for social and other cloud data that should appeal to marketing and sales departments. IT teams lacking knowledge in the area, can also leverage GoodData as a point solution for social media analysis, complementing existing BI tools for traditional business reporting.

Cautions

GoodData earned below-average product scores for a decentralized BI use case and is less well-suited for analytic dashboards, business user data mashups, collaboration and free-form interactive exploration than many other vendors in this Magic Quadrant. Consistent with that assessment, customers rate GoodData in the bottom five vendors for support for complex types of analysis (see Note 3) — which is not surprising, because it only recently added a data discovery offering. We would expect these results to improve as customers start using its new components — Analytical Designer and Data Explorer — as part of their data discovery offering.

Approximately 62% of customer responses reported some type of problem with the software (versus 49% on average), with 20% of customers citing absent or weak functionality as a problem with the software — almost twice the survey average. Again, the new data discovery offering could help mitigate this issue.

Despite having a scalable architecture and being capable of handling the data of many customers in its cloud environment, GoodData customers report having deployments with relatively small numbers of users and data volumes. It shows a below-average number of 611 users and the smallest average data volume size with just 308GB per customer. Prospective customers with large deployment ambitions should use a proof of concept to ensure that GoodData's platform is able to handle their requirements.

IBM

IBM offers a broad range of enterprise-grade BI, performance management and advanced analytics platform capabilities, complemented by a deep services organization that is ready to implement them in solutions for any domain, industry or geography. IBM Cognos is an integrated BI platform with capabilities for Web-based ad hoc query, report and dashboard authoring and consumption, OLAP, scorecarding, production reporting, scheduling, alerting, data discovery and mobile.

IBM has demonstrated innovation and has a compelling vision for the future with Watson Analytics, its next-generation data discovery capability, but has faced challenges in the core BI business to deliver a positive customer experience and meet important business-user-centric market requirements. High marks for sales strategy and industry and geographic reach also bolster IBM's position on this Magic Quadrant. In 2015, IBM must translate its vision into market momentum and improve its customer experience to retain its position in the Leaders quadrant.

Strengths

A product strategy spanning BI, performance management and advanced analytics and innovation around smart data discovery in IBM Watson Analytics (made generally available in December 2014), contributed to IBM's strong position for Completeness of Vision. IBM hopes Watson Analytics has the potential to give business users access to a new user experience for data discovery, featuring an integrated analytic workflow that includes self-service data preparation, natural-language query generation and exploration, and automatic pattern detection and prediction — to allow business analysts and citizen data scientists to find valuable insights in data without advanced skills.

IBM earned a strong overall product score. Enterprise features supporting centralized deployments — such as BI platform administration, IT developed reports and dashboards, metadata management and traditional styles of analysis — in addition to collaboration (through integration of IBM Connections with IBM Cognos 10), are platform strengths.

IBM Cognos is well-suited to large deployments centered on global production reporting that are centrally managed by IT. IBM is ranked in the top four (in percentage) by customers reporting using the platform for centralized BI deployments. It was ranked in the top five in terms of the extent of global deployment and average deployment size (at 2,690 users versus the average of 1,554 for this Magic Quadrant) with above-average data sizes. More than 77% of IBM's customers consider it to be their BI standard, which ranks it third highest. Moreover, enterprise features for BI platform administration, metadata, BI platform integration, IT-developed reports and dashboards, development and integration and traditional styles of BI (ad hoc reporting and OLAP) are product strengths.

IBM has taken a positive step toward improving its sales relationship with customers. Pricing introduced in July 2014 has been simplified into fewer roles, which has resulted in many users getting access to more functionality in the Cognos platform through existing contracts.

Cautions

While IBM Cognos is embedded and sold in over 130 IBM applications, during the past year Gartner has seen fewer new greenfield IBM Cognos purchases; rather, its growth has come mostly from upgrades and audits with much of the new business-user-driven analytics projects in its installed base going to Tableau or Qlik. Execution is slightly better than SAP and Oracle, but despite a broad product portfolio IBM Cognos BI is still used primarily for systems-of-record reporting and customers report achieving lower business value than most other vendors in this Magic Quadrant. Narrow use, despite broad functionality, is a challenge faced by most of the IT-centric platforms in this Magic Quadrant.

While IBM's vision is strong, its current execution is not. Since the attempt to position its Cognos Insight planning client for the data discovery market met with limited market adoption, IBM is pursuing a new strategy around IBM Watson Analytics to meet emerging business-user requirements. Customer scores for market understanding (see Note 3), which include ease of use (for consumers, authors and administrators), support for a range of complex types of analysis, and breadth of use across analytics capabilities, continue to be rated in the bottom quartile of the vendors in this Magic Quadrant. Moreover, IBM's customers placed IBM in the bottom quartile for achievement of business benefits from its BI deployments — similar to most other IT-centric vendors. IBM is investing aggressively in IBM Watson Analytics, hoping to reverse this critical customer perception.

Customers continue to rank the IBM sales experience as near the bottom. While the new pricing model is a positive step, anecdotally, Gartner inquiries suggest that IBM customers are not happy with their sales relationship. Contract negotiations are often protracted and perceived as inflexible, and auditing is a frequent source of customer complaint and dissatisfaction with IBM. Moreover, customers express concerns around the time and effort needed to manage IBM's subcapacity monitoring for Processor Value Unit (PVU) pricing in a shared virtual environment. This has been more challenging because IBM Cognos does not have built-in license monitoring capabilities. IBM is taking steps to address this with enhancements in the latest Cognos BI release to help customers monitor their environments for compliance.

Customer experience (see Note 3), which is a combination of ratings for product support, product quality, migration/upgrade difficulty, user enablement and availability of skills, is rated by IBMs' customers as an ongoing source of dissatisfaction. This is an important element in a customer's overall view of their BI vendor.

IBM's stated intention is to skip a generation of data discovery tools and move into "smart discovery," but it could take some time for the product to mature and for customers to realize its full potential. IBM has been less aggressive than some of its competitors in pursuing a cloud strategy. IBM's first public cloud BI offering, IBM Watson Analytics, forms the cornerstone of its nascent cloud BI strategy. IBM Cognos BI will be available in 1Q15 on the IBM SoftLayer cloud.

Information Builders

Information Builders is a leader in the market for BI and analytics platforms. It sells multiple components of its integrated WebFOCUS BI and analytics platform (AppStudio, Info-Discovery, InfoAssist, BI Portal, Server, Active Technologies, Magnify, Mobile Faves, Performance Management Framework and RStat). In addition to the traditional reports and dashboards for senior management, WebFOCUS is frequently used by IT developers to create analytic applications for operational workers and information consumers — inside and outside the firewall.

Information Builder's position as a Leader in this Magic Quadrant is driven by its positive track record in creating pervasive BI solutions for a high volume of mainstream users, particularly in customer-facing scenarios. Its WebFOCUS platform is well-architected and offers a broad array of functionality; however, its execution is hampered by perpetually modest growth and customer adoption. After a slow start, Information Builders made significant progress in the self-service/data discovery area with the release of InfoDiscovery; however, Gartner needs to see how well this product is adopted during 2015. Information Builders' lower-than-expected customer experience scores (see Note 3) from the customer reference survey prevent it from rising higher in the Leaders quadrant.

Strengths

Information Builders clearly differentiates itself in the area of pervasiveness. A significant percentage of its clients disseminate information and decision support to thousands of operational workers. Information Builders' reference customers reported almost double the average (for this Magic Quadrant) for size of deployment in terms of numbers of users.

Information Builders earned high product scores for centralized and embedded BI use cases, where its BI platform administration, development and integration, IT developed reports and dashboards, metadata management and mobile are platform strengths.

Breadth of functionality is another key strength of Information Builders. While WebFOCUS is primarily known for its strong interactivity through parameterized reporting, during the past few years Information Builders has modernized WebFOCUS with an array of technologies, including ad hoc analysis (Active Reports), search (Magnify), Mobile (Faves), advanced analytics (RStat) and location intelligence. Information Builders also offers a number of vertical applications based on the platform for industries such as law enforcement, financial services, higher education and healthcare.

Information Builders does have an enthusiastic installed base, evidenced by the fact the vendor was able to provide more than twice as many customer references as any other vendor surveyed.

Developers are attracted to WebFOCUS and its ability to access disparate data and applications sources to create not just reports and dashboards, but to build information applications with the commensurate security and write-back functionality.

Cautions

Information Builders was slow to promote, and benefit from, the trend toward self-service and data discovery. Info-Discovery, released in 2H14, is a solid first offering and leverages the vendor's native

integration capabilities for its data mashup and modeling capability. Moreover, its vision for a governed data discovery architecture, exemplified by its "Visualize Responsibly" campaign, is a sound strategy and ties in nicely to the tightly managed metadata layer of WebFOCUS. However, we need to see more adoption of Info-Discovery to consider Information Builders a true data discovery vendor. Information Builders is rated weaker in business-user-oriented data discovery, analytics dashboards, free-form data exploration, collaboration, cloud deployment as well as for traditional styles of analysis (specifically OLAP). This is consistent with Information Builders' primary use for IT-centralized deployments as well as the fact that Information Builders' data discovery offering is newly released with limited adoption to date.

Overall, Information Builders' customer experience scores are not as strong as we would expect — compared with last year and given its high-touch model and close relationship with customers, the enthusiasm at its user conference and the willingness of the vendor to support customizations. In particular, customers are concerned with the availability of skills and their more-difficult-than-average migration experience. The migration ratings make sense as most of the references had just completed upgrading to Release 8, which was a major upgrade in architecture, security and the front end. Future upgrades to WebFOCUS are likely to be less difficult. Moreover, given its focus on customer-facing applications, we would have expected much higher scores for achievement of business value. For example, it ranks as below average on the customer reference scores for composite business benefits achieved with the platform. Customer references who identified themselves as primarily business users did score Information Builders significantly higher on business benefit questions than the references primarily from IT; however, the former were a minority of the vendor's references.

Information Builders has been unable to turn a robust product platform and generally positive sales experience into above-average market growth. The vendor perpetually shows modest customer adoption, making it unable to capture a dominant share of the market. Information Builders has bolstered its indirect channels and improved its global presence as a key growth enabler. This is a delicate balance, however, because indirect sales channels and geographic breadth will make it difficult for the vendor to execute on its high-touch model based on a willingness to customize solutions to meet client requirements.

Logi Analytics

Logi Analytics' BI platform is composed of two distinct products, Logi Info and Logi Vision. Logi Info delivers a wide range of functionality typically used by IT developers to deliver analytic content such as reports and dashboards to end users. Logi Info is also used extensively by organizations in an OEM capacity to embed analytic content in websites and applications, and by end-user organizations to extend BI access externally to customers, partners and suppliers. Logi Vision is a relatively new data discovery tool, launched in January 2014, and offers business users and analysts the ability to prepare and analyze data and share findings using Logi's differentiated collaboration capabilities. Integration between the two products is a "work in progress," but there is a clear road map to improve interoperability between Logi Info and Logi Vision — through the development of a common underlying data hub and new application services — during 2015.

With the introduction of Logi Vision, to address business users' buying requirements for data discovery, coupled with a product road map aimed at addressing analytics governance concerns, Logi is again positioned as a Challenger. In addition to creating the framework needed to offer governed data discovery capabilities through the platform, Logi has introduced innovative social collaboration and crowdsourcing functionality into the Logi Vision product, which contributed to its improved product vision rating this year.

Strengths

Through its two primary products, Logi Info and Logi Vision, Logi delivers a wide range of analytic capabilities at a price point that attracts customers to the platform and offers an alternative to supporting several BI and analytic tools to support different users and use cases. More than 30% of references cited low license cost, or implementation cost and effort, as the top reasons for selecting Logi; it ranked in the top quartile in sales experience of all vendors in this Magic Quadrant.

Logi Analytics scores well in product features that support centralized and embedded use cases; specifically, development and integration, embedded BI, IT-developed reports and dashboards, and traditional styles of analysis. The platform is also rated highly for collaboration and analytic dashboards, indicating good potential for Logi Vision in meeting business-user requirements.

Customer experience (see Note 3) is a clear focus and strength for Logi. It was rated third highest (of all the vendors in this Magic Quadrant) for customer experience — customers rated it fourth overall for support and fifth overall for product quality (two key metrics for customer experience). Logi's high customer experience score was also driven by a strong user-enablement rating and by receiving the lowest overall migration difficulty rating.

Logi is widely used by independent software vendors and end-user organizations who leverage the platform's ability to embed content in websites and applications and to extend the reach and accessibility of BI and analytics to a broad range of users. More than 50% of references report using Logi's platform in an OEM/embedded use case, ranking it third-highest.

Logi has, at 28%, the fifth-highest percentage of references actively using mobility for BI, which is significantly higher than the average of 19%. An additional 30% of Logi's customers cited their intention to deploy mobile BI within the next 12 months, which validates Logi's investment in mobile capabilities within the platform.

Cautions

Logi is currently being used primarily to support relatively simple analytic use cases such as reporting, dashboards and basic ad hoc analysis, based on the fourth-lowest rating for complex types of analysis. Most customers are currently using Logi Info, which supports these types of use cases; adoption of Logi Vision, which is used for more complex types of analysis, does not yet have the

same level of traction and adoption in Logi's customer base — resulting in the low score and ranking for complexity of analysis (which measures how the platform is used within organizations — see Note 3).

Related to the first caution noted, Logi is used by organizations primarily in support of centralized/IT-delivered BI and OEM/embedded use cases and is among the lowest of all the vendors in this Magic Quadrant for use in decentralized and governed data discovery use cases. This is likely to change as Logi Vision matures as a data discovery product and is integrated with the overall platform.

The average deployment size and data volumes within organizations that have deployed Logi are both below the average for this Magic Quadrant. Average data volume for a Logi deployment is 7.9GB, compared with an overall average of 14.2GB; the average deployment size for Logi is 509 users, compared with an overall average of 1,554. Although its average deployment size was below the survey average, it should be noted that deployments at reference organizations ranged from as few as three users to over 5,000. While Logi does have large customers, and is the enterprise standard in almost 70% of survey reference organizations, scalability should be evaluated for larger customers considering Logi — particularly in organizations with higher-than-average data volumes.

Weaker capabilities include business-user data mashup, cloud deployment, free-form exploration and metadata management, largely driven by some missing or weak subcriteria identified within each capability. Cloud deployment is an example where Logi performed well on some subcriteria — such as special purpose connectors to cloud data sources and direct connect for cloud and on-premises data sources — but is weaker on packaged content, self-service elasticity and self-service administration. It should be noted that Logi recently announced an hourly pricing model for Logi Vision for Amazon Web Services (AWS) that should improve some of the weaker areas of its cloud deployment capabilities, particularly around self-service elasticity and administration.

Microsoft

The Microsoft BI and analytics product portfolio supports a diverse range of centralized and decentralized BI use cases and analytic needs for its large customer base. Organizations typically deploy SQL Server and SharePoint to support IT-developer-centric data management, reporting and administration requirements, while business-user-oriented, self-service data preparation and analysis needs are delivered by the Power BI components of the portfolio through Excel 2013 and Office 365. Business-user enablement is a clear focus of Microsoft's product road map and business model evolution — as evidenced by its new "freemium" Power BI product offering (currently in preview), which can be deployed as a stand-alone solution for business users to author and share analytic content without the need for Excel 2013 or an Office 365 subscription.

Microsoft's leadership position in the Magic Quadrant is primarily driven by a strong product vision and future road map, as well as a clear understanding of the market's desire for a platform that can support systems-of-record requirements and deliver easy-to-use data discovery capabilities, with support for promotability of business-user content and governance. Power BI has gained some traction, but has yet to gain widespread market acceptance due to the complexity of on-premises deployments and the relatively limited functionality currently delivered through the Office 365 cloud; barriers which Microsoft is trying to address with the new Power BI offering currently in preview and due to be released later in 2015. As Power BI matures and cloud adoption grows, Microsoft is positioned to leverage its large customer base (and capitalize on the already pervasive use of Excel and the existing SQL Server Analysis Services footprint in the market) to expand the breadth and depth of its deployments in organizations and increase its overall BI and analytics market share, if it can increase its focus on BI sales and marketing and overcome customers' structural barriers to adoption.

Strengths

Overall cost of ownership and license cost remain the top reasons customers choose Microsoft (according to the survey). Microsoft has integrated good capabilities into Excel such as Power Query, Power Pivot, Power View and Power Map, which are included with existing enterprise license agreements. Additional cloud-based consumption and collaboration capabilities are currently available in Power BI through a subscription-based pricing model in Office 365. Microsoft recently announced a freemium license model for its new stand-alone Power BI offering, which includes Power BI Designer for content authoring, set to be officially released during 2015 and featuring a free tier for up to 1GB of data storage per user and a Power BI Pro option for up to 10GB available for $10 per user per month (significantly reduced from the Power BI version currently offered through an Office 365 subscription).

Many organizations already use Microsoft Excel extensively for data manipulation and presentation of information through spreadsheets, which gives Microsoft a strong foundation on which to build with Power BI and close the gap between it and the data discovery leaders. A key differentiator for Microsoft is its ability to deliver a range of business user capabilities, encompassing self-service data preparation with Power Query and Power Pivot, interactive visualization through Power View and Power Map and the ability to share with SharePoint and Office 365, which few vendors can claim without third-party support and partnership. Platform scalability is a strength of the Microsoft platform, which ranked highest for data volume accessed — with an average data size of 62TB, compared with an overall average of 14.2TB.

Microsoft reference organizations also report deployment sizes larger than those of any other vendor in this Magic Quadrant, with an average number of end users of 6,000 compared with an overall average deployment size of 1,554. With the release of the new stand-alone version of Power BI, business users will have access to built-in connectivity to on-premises SQL Server Analysis Services cubes, which will allow organizations to leverage existing data assets without having to move to replicate in the cloud and further unlock the value of existing multidimensional data structures.

Microsoft products scored well in its traditional areas of strength: BI administration and development, and integration and collaboration. They also scored highly on business-user data mashup — an area of investment for Microsoft with Power Pivot and Power Query.

Reorganization and new leadership at Microsoft appears to be positive for Microsoft BI. Since taking

over, new CEO Satya Nadella has made support for Apple and Android devices, as well as cloud deployment, a high priority.

Cautions

Microsoft's product portfolio is complex and includes many components, which can cause confusion for customers evaluating purchase options. The fact that many of the newer capabilities that are important to buyers in this market require current versions of Office, SQL Server and SharePoint adds to the complexity and represents a barrier to adoption for many organizations that are on older versions and are not yet willing to buy Office 365 and deploy BI and analytics in the cloud. For example, the workflow between components such as Power Query, Power View and Power Pivot is not yet completely seamless. Moreover, the role of SharePoint dashboards and Reporting Services has not been clearly articulated; Reporting Services is not supported in Azure. While it is a work in progress, Microsoft is attempting to address many of these limitations in the forthcoming stand-alone version of Power BI, which does not require Office 2013 or an Office 365 subscription and can access Analysis Services structures and content without physically moving underlying enterprise data to the cloud.

Microsoft had the highest percentage of customer references citing absent or weak functionality (for example, no drill-through capabilities in Power View) as a platform problem. This is consistent with last year's results; and while Microsoft is addressing weakness in mobility, analytic dashboards and free-form interactive exploration with Power BI, market awareness and adoption has been slow to materialize — as shown by minimal client inquiries since its launch in early 2014.

Microsoft's sales model continues to be a pain point for customers, who rated Microsoft fourth lowest for overall sales experience. Customers have historically found it difficult to engage directly with Microsoft during the sales cycle, which was a major complaint from IT but is an even greater concern for Microsoft as it attempts to appeal to business buyers that have high expectations of simplified license models and purchase options.

Microsoft has a large network of implementation partners and developers that are skilled in most aspects of traditional centralized BI deployments. However, customers may have difficulty finding external resources with experience in the newer Power BI stack, which requires a different set of skills and expertise than Microsoft's sweet spot of systems-of-record, developer-focused BI deployments.

MicroStrategy

MicroStrategy offers an enterprise-grade and organically grown end-to-end BI platform that is well-suited to large and complex system-of-record reporting and governed data discovery requirements. It has a compelling product and vision for large-scale governed data discovery and has invested early in cloud and mobile BI; however, its execution during the past year has been poor and the company is regrouping.

Executive turnover and the announced restructuring may have contributed to eroding the customer experience at a time when the company must distance itself from its "old BI" brand and convince the market that it has a compelling platform for the future. MicroStrategy has made key executive hires and is refocusing and repositioning to leverage its differentiators into renewed momentum in 2015. We need to see execution at MicroStrategy during 2015, if it is to remain a Leader in the Magic Quadrant in the future.

Strengths

MicroStrategy is an enterprise-grade platform with strong vision around governed data discovery (including for self-service data preparation), and is well suited to companies that need large-scale system-of-record reporting, mobile and dashboards, and are not tied to an enterprise application stack (such as Oracle or SAP).

MicroStrategy continues to earn strong composite product ratings from customers and is most often chosen because of its functionality. It also ranked in the top five vendors in this Magic Quadrant as a platform used for IT-driven, centralized BI deployments. While most customers deploy the platform centrally, it scores well across all four use cases. It has particular strengths in enterprise features, such as BI platform administration, internal platform integration, metadata management and traditional styles of analysis. It is also rated highly for analytic dashboards, business-user data mashup and free-form exploration — largely due to its investments in its data discovery capabilities, Visual Insight.

MicroStrategy remains an industry benchmark for large BI deployments running on top of large enterprise data warehouses, and is often viewed as the vendor of choice when enterprise requirements are complex. The company invests continuously in scalability and performance as well as big data-related enhancements (for example, Prime, a scalable multiterabyte in-memory engine developed with Facebook and direct Hadoop connectivity) for its natively developed and largely integrated portfolio. This enables it to support among the largest average data volumes accessed in data repositories and among the largest average number of users (2,648 versus an average of 1,554). Moreover, MicroStrategy is typically deployed in larger enterprises that consider it to be their enterprise BI standard more often than most other vendors.

MicroStrategy is the only vendor in this Magic Quadrant whose customers report selecting it for their mobile capabilities as a top reason — 51% of customers either have deployed or are piloting it for mobile, compared with an average of 30% overall. The cloud has been another area of early and aggressive strategic investment for MicroStrategy compared with other BI vendors, with MicroStrategy Cloud customers primarily using it for hosted private cloud deployments.

Customers not only value simplification in their user experience, they also want simplification in their vendor relationship. MicroStrategy has taken the bold and difficult step of simplifying its pricing (21 SKUs down to four) and making it public on its website. Pricing complexity has been a perennial complaint of MicroStrategy customers. This change is an important step in reversing this perception in particular, and in improving the customer experience in general.

Cautions

A challenging year for MicroStrategy, 2014 saw sales momentum decline, a revolving door at the executive level and deep cuts in staff (20%) across the board, which has resulted in disruption across all functions. MicroStrategy customers report a below-average customer experience, including support, product quality, a more difficult than average migration experience, and below-average achievement of business benefits — consistent with the results of the other IT-centric vendors. The company is regrouping and has made a number of positive changes to improve in the future. It will need to regain momentum in 2015 to remain a significant player in the market.

MicroStrategy must overcome a branding problem in the market and its installed base. It continues to be associated with "traditional BI," due in part, perhaps, to competitors effectively pigeon-holing it as such — even though the product portfolio and road map is focused on important requirements for governed data discovery in very large deployments, with additional differentiators around self-service data preparation.

While the MicroStrategy development environment is robust and flexible, there is a steep learning curve — even for seasoned report developers building any level of analytic complexity into parameterized reports that simulate ad hoc analysis and interactive dashboards for business users. Even though usability enhancements continue to be delivered with MicroStrategy 9.x (such as more one-click user actions, reusable dashboards and dashboard design wizards) and more planned in MicroStrategy 10, its customers continue to rate the platform as below average for ease of use for development, ease of use for end users, and ease of administration and implementation. Broader adoption of Visual Insight should contribute to resolving these issues and changing this assessment, but its relevance is still low in the overall user base.

OpenText (Actuate)

The OpenText (Actuate) iHub 3.1 platform supports an integrated suite of reporting and analysis tools (Designer Pro, Analytics) in the Business Intelligence Reporting Tool (BIRT) product family, supporting the needs of most user types from developers to information consumers and business analysts. In particular, Actuate is known for delivering highly personalized data-driven applications in customer-facing external use cases. It has also built up a large population of application developers in the Eclipse community to embed Actuate software into their applications.

Actuate is positioned in the Niche Players category because it primarily succeeds in one dominant use case — embedded analytical applications for developers. Actuate has invested in a visual data discovery and analytics offering, BIRT Analytics, but the product has yet to be widely adopted. Moreover, Actuate's customer reference scores have brought down its scores for Ability to Execute and Completeness of Vision.

Strengths

Actuate's greatest strength is its ability to deliver data-driven applications to a high volume of users, particularly in an embedded use case. An overwhelming percentage of customers (greater than 90%) report using the product for static and parameterized reporting.

BIRT is commonly used by developers to embed BI and analytic content into applications, and its product scores indicate that the capabilities within the platform to create and embed content are better than the average for vendors in this Magic Quadrant.

During the past few years, Actuate has modernized the iHub interface, delivering an improved user experience and better integration across the product line. In addition, Actuate is focused on the IoT trend, providing a new rich source of data for information-centric applications.

The OpenText acquisition is largely viewed as a positive move — giving the vendor more stability, and access to more resources, salespeople and channel partners — although it also introduces some uncertainty that Actuate will continue as a dedicated analytics group inside OpenText.

Cautions

Actuate was ranked at the bottom of 24 vendors on customer experience (see Note 3) and sales experience; and 20 out of 24 for market understanding (which is a composite of ease of use, complexity of analysis and breadth of use). It also scored highest in migration difficulty. The net result of all these scores is to push Actuate deeper into the Niche Players quadrant.

Actuate's core strength — providing customer-facing analytic applications to high volumes of users, will come under increasing competitive pressure as more vendors move to the cloud and are able to provide similar user scalability to high user volumes outside the firewall.

While Actuate has a broad product family covering both the information delivery needs of consumers and the analysis needs of power users, it is overwhelmingly used for the former — with weaker product scores for the latter. BIRT Analytics is a capable offering, but Actuate needs to show greater customer adoption to be viewed as a comprehensive BI and analytics platform.

The downside of the OpenText acquisition is the complexity of crafting a cogent marketing message around such a diverse product set; one that spans two major markets in enterprise content management and BI and analytics platforms. It was already challenging enough for Actuate to weave a story that combined the BIRT Content Services (Xenos) with BIRT Analytics (Quiterian) and iHub.

Oracle

Oracle has a very large and diverse set of capabilities provided by the many products in its BI and analytics portfolio, which is most often used for large-scale enterprise deployments. Its products range from hardware to software platforms, and include Oracle BI Foundation Suite, more than 80 prebuilt BI applications, Oracle Endeca Information Discovery and Oracle Essbase — most of which are available on the Oracle Exalytics Engineered System. The product portfolio also includes Oracle Transactional Business Intelligence, a family of embedded SaaS analytics offerings in the Oracle Fusion SaaS applications; a

newly announced and generally available (September 2014) BI Cloud Service; and Oracle Big Data Discovery (now generally available). Additional BI and analytics-related products (but not included in this Magic Quadrant evaluation) include Oracle Database 12c, Hyperion Financial Management, Oracle Advanced Analytics, Hyperion Planning, and Hyperion Profitability and Cost Management, and the family of Oracle Big Data products.

Oracle's position on the Magic Quadrant reflects a relatively fragmented product vision compared with other large vendors, and low scores in the Gartner customer satisfaction survey. Oracle must translate its investments in improved usability, business-user-driven data discovery and cloud into higher business value for customers and an improved customer experience to be competitive across its wide range of products and competitors and to remain in the Leaders quadrant in the future.

Strengths

Oracle is primarily used for large-scale, centrally provisioned systems-of-record reporting, most often in companies that also deploy Oracle E-Business Suite. Integration with enterprise applications is the primary reason for selecting Oracle, according to customer references. Consistent with this dominant use, Oracle earned above-average product scores for development and integration and traditional styles of analysis. It has also demonstrated vision around multistructured and big data analytics with Oracle Endeca, a search-based data discovery platform, and the newly released Big Data Discovery platform for Hadoop.

Oracle's packaged business domain and industry analytics applications for Oracle E-Business Suite, PeopleSoft, Siebel and JD Edwards, are a top buying driver and give customers a way to deploy Oracle BI more quickly, leveraging Oracle applications and other data. The analytic applications include prebuilt extraction, transformation and loading (ETL) using Oracle Data Integrator, physical star schema models, prebuilt reports and dashboards for a range of functional areas including financial management, CRM and supply chain, as well as industry verticals including retail and telecommunications.

Oracle BI has gained adoption in the cloud through embedded analytics in its Fusion SaaS applications in the human capital management, CRM and ERP domains. Oracle Transactional Business Intelligence (OTBI) has introduced Oracle BI to growing numbers of line-of-business users in HR, sales, service and marketing, and finance functions. Oracle now also offers a warehouse-based version called OTBI Enterprise, which offers packaged analytic capabilities in the cloud similar to its on-premises BI applications.

Oracle has a substantial sales and marketing footprint, and a large set of global system integrators trained on many of the Oracle products who can build, implement and deploy custom applications and integrations.

Oracle's talent, products and technology gained with the Endeca acquisition can be leveraged by customers to address growing requirements for search-based data discovery on multistructured data. Oracle Endeca also received top quartile scores for search-based data discovery.

Cautions

Customers rate Oracle near the bottom across all customer experience measures. Complexity and cost of product line are sources of customer concern. Difficulty of use, development and administration, low product quality and quality of support are primary challenges noted by reference customers. Low sales experience and low achievement of business benefits were also cited.

Oracle scored below the average for this Magic Quadrant on most product capabilities, but above the average for development and integration and for traditional styles of analysis.

Oracle has recently entered the market with a cloud BI platform offering, but is late to the market compared with cloud BI pure-play vendors. The new Oracle BI Cloud Services offering is likely to appeal to Oracle's cloud customers and be bundled with larger cloud services deals, but early versions will not be competitive with other cloud offerings that have been in the market much longer.

Oracle is very late to market with data discovery capabilities to address mainstream buying requirements. The newly announced Big Data Discovery tool (launched during February 2015) and Visual Analyzer (in Beta from January 2015) may help Oracle fend off the data discovery competition in its installed base. Big Data Discovery looks promising and may provide Oracle with new opportunities both inside and outside its installed base.

Panorama Software

Panorama Software's Panorama Necto suite innovatively combines social BI with enterprise features to deliver a unique and guided interactive and data discovery experience that is collaborative and automatically highlights important insights to the user.

Panorama is in the Visionaries quadrant because of its product vision, innovation and strong market understanding. It has delivered a next-generation yet governed data discovery experience based on a unique combination of social and collaboration features together with smart data discovery. However, limited sales, marketing, partnering and geographic presence hinder its growth potential.

Strengths

Panorama Necto combines social, collaboration and smart insight capabilities with enterprise features to deliver a unique, yet governed and guided data discovery experience. Necto is an implementation of smart data discovery with automatic recommendations of relevant insights based on patterns in the data, users' preferences and past behavior. Panorama has achieved strong results across key measures of Completeness of Vision, such as market understanding (see Note 3), with high marks for ease of use, breadth of use and enabling users to conduct complex types of analysis.

The main reasons why customers choose Panorama's software are its ease of use for end users and developers and its functionality. Customers report among the fastest average report development

times of any vendor in this Magic Quadrant. Moreover, Panorama's survey results again indicate the widest use of collaboration capabilities, which confirms that its native social and collaboration capabilities are central to what customers value about the product. Collaboration, analytic dashboards and business user data mashup are key product strengths.

While Panorama Necto supports a range of relational and OLAP data sources, it continues to be used extensively as a front end for Microsoft SQL Server Analysis Services — via Multidimensional Expressions (MDX). It can also leverage Microsoft Power Pivot and Reporting Services as data sources, and integrates well with Microsoft SharePoint. This may, in part, also explain its fast report development time results. However, unlike traditional OLAP front-end tools, Panorama Necto offers deep OLAP-style analysis within an updated social and collaboration-based guided data discovery user experience.

Panorama also continues to receive high reference scores on critical customer experience metrics for support and product quality. Customers also rank Panorama highly for achievement of business benefits.

Although Panorama customers tend to be smaller companies that report smaller data volumes and user sizes, 75% of them consider it to be their enterprise standard.

Cautions

Panorama Software relies heavily on Microsoft, with products optimized for Microsoft SQL Server, SharePoint, Power Pivot and Azure. Although this creates an opportunity to sell into Microsoft's large installed base of customers, and was a particularly attractive when Microsoft's BI capabilities were lacking, it is also increasingly a risk. Microsoft continues to improve its own BI offerings with a compelling cost-value proposition and road map. This is likely to narrow the opportunity for products that only complement Microsoft's information management stack. Panorama is moving to lower its strategic reliance on the Microsoft stack.

Cloud, mobile BI and metadata management are weaker components of the platform, although Panorama has recently added support for Android and iOS devices.

Compared with its competitors, Panorama has a small direct sales team and a limited partner program. This continues to pose challenges for Panorama in generating awareness and gaining traction in an increasingly crowded and competitive market — particularly as other vendors with greater resources (including Logi Analytics, SAP, SAS and IBM) are beginning close in on Panorama's product innovation gap.

Panorama's unique capabilities, exceptional customer satisfaction and lack of resources to capitalize on its differentiators, make it an attractive acquisition candidate for an organization looking for business-user-oriented capabilities. Any acquisition could cause disruption to customers.

Panorama's limited geographical presence remains an issue preventing broader awareness. Although Panorama has support centers and distributors globally, its sales are concentrated in the Middle East, North America and Europe.

Pentaho

Pentaho is transforming from an open-source-based BI platform into a big data and embedded analytics specialist, enabling significantly more complex use cases. Pentaho's data integration (PDI) and analytics components (Weka and Data Science Pack) are at the core of this transformation, delivering tight integration with Hadoop and other NoSQL databases as well as support for advanced analytics with R. Pentaho is positioned to the right in the Niche Players quadrant, due to its focus and innovation in the big data analytics space.

On 10 February 2015, Hitachi Data Systems announced its intention to acquire Pentaho. Hitachi Data Systems plans to continue to operate Pentaho as a separate business unit and to embed Pentaho into its portfolio of big data and analytics products and services, with a particular emphasis on solutions for the IoT. The acquisition is expected to close by June 2015.

Strengths

Pentaho continues to have success with embedded BI — where it has a large installed base of customers — and continues to offer a broad spectrum of traditional BI tools. Embedded BI and traditional styles of analysis are rated as platform strengths and the company is steadily shifting to big data initiatives. Customers recognize its ability to collect and transform many data sources, including social media, and with 20% of reference customers claiming to use Pentaho to collect and analyze data this type of data placing it among the top three in this category. Data access and integration is a top reason why customers choose Pentaho.

Pentaho has been early to invest in self-service data preparation, with 17% of its customer references saying they use the platform for this purpose — the third-highest score in this Magic Quadrant. It will continue to expand the breadth of connectors offered with the new solutions that will be available during the coming months — for big data sources in particular, such as cloud and sensor data supporting the IoT.

Customers are generally satisfied with the cost/value proposition of Pentaho. Customers report achieving above-average business benefits, and the low license cost is the top reason why customers select the platform. Pentaho is also in the top quartile of vendors whose customers report no limitations to further adoption of the platform.

The average report development time with Pentaho is 3.6 days — slightly better than the overall average of 4.0 days. Coupled with the data preparation and advanced analytics capabilities offered by the vendor, this addresses the needs of a new type of user — the data scientist — which expands Pentaho's opportunity beyond its traditional developer customer base.

Cautions

Pentaho faces a number of important challenges that may hamper its future growth, as 14% of

reference customers report that the software quality is a limitation that prevents the expansion of use and 68% of customers (the highest percentage in the Magic Quadrant) report some type of problem with the platform. Also, 24% of the reference customers claim that the platform is unreliable and unstable, while another 24% tag it as difficult to implement. Moreover, customers give Pentaho lower-than-average scores for customer experience (see Note 3), including product quality and support. All these issues may have been the result of the gradual customer migration process to version 5.0, a major release that included a completely rearchitected platform and new user experience. Furthermore, Pentaho asserts that these issues are largely addressed with versions 5.1 and 5.2, introduced during 2014. We would expect these results to improve in 2015 as customers upgrade to these new releases.

Pentaho continues to rebrand itself and must continue to generate awareness in the market to establish itself as an innovator, based on the forward-looking capabilities available on its portfolio. Many organizations still see Pentaho as an open-source BI pure-play vendor. The company needs to close some of the gaps in its platform, such as expanded cloud support (a coming release will signal a stronger partnership with AWS) — and more user-friendly tools for free-form information exploration. Collaboration, metadata management and mobile are also rated as weaker components of the platform.

Over the years, Pentaho' legacy as an open-source and embedded solution has contributed to a geographic presence that is more pervasive than that of many other companies of equivalent size. That network of partners needs to be able to support more advanced initiatives leveraging the platform's capabilities. They will need ongoing training and certification to support the company's new set of capabilities in the big data space. They should also be able to support other components of big data architectures, such as Hadoop as the ecosystem expands. We would expect the acquisition of Pentaho by Hitachi Data Systems will significantly improve Pentaho's ability to expand globally.

Prognoz

The Prognoz BI platform (Prognoz Platform) consists of a highly integrated, end-to-end suite of components used for the development, deployment and administration of tightly coupled data warehouse and BI solutions. The platform supports the full spectrum of analytic capabilities, including traditional reporting and dashboarding, interactive visualization and advanced analytics such as time series analysis, modeling and forecasting. Prognoz also offers a wide range of industry- and domain-specific analytical applications built on top of the platform, which are typically productized versions of solutions built for customers who leverage the extensive services capabilities of Prognoz.

While Prognoz does offer a wide range of capabilities, and despite investments in a global strategy, its success and primary customer base remains concentrated in Eastern Europe and the platform has yet to gain significant awareness and traction in other regions of the world — which is a major execution-related reason for its placement in the Niche Players quadrant again this year. From a Completeness of Vision perspective, the product road map currently lacks some critical forward-looking components — around smart data discovery and business-user data preparation — that we expect to drive buying requirements in the future and that are being planned and developed by competing BI and analytics vendors.

Strengths

Customers rated Prognoz second (of the vendors in this Magic Quadrant) in terms of sales experience, indicating a high level of satisfaction during the entire sales cycle. Customers value the flexible pricing model that Prognoz offers, coupled with the fact a single end-to-end platform eliminates the complexity of engaging with multiple vendors to support their BI and analytic needs. The desire for a full-feature platform ranks high on the list of buying criteria for customers, with 42% of references citing functionality as their top reason for buying Prognoz.

Prognoz earned an above-average aggregate product score, with above-average ratings on most product capabilities — apart from business user data mashup, collaboration and free-form exploration. This underscores why Prognoz scored better for centralized and embedded BI use cases than for decentralized deployments.

Prognoz was rated third overall in market understanding (see Note 3), which measures how well the vendor delivers on current buying requirements. It is composed of ease of use, complexity of analysis and breadth of use, and Prognoz was rated above the overall average for all of these.

When asked about platform problems, such as performance and scalability issues, difficulty with use or implementation, instability or missing functionality, Prognoz received a top rating with 90.5% of references indicating no such issues with the platform. Similarly, Prognoz received a top rating regarding limitations to wider deployment, with 82.5% of references citing no such limitations.

Prognoz ranked second in user enablement, which includes documentation, training, tutorials, user community, customer conferences and availability of skills. For the related strength of overall support, Prognoz was ranked in the top five by its references, with ratings above the overall average for all individual components of support: response time, level of expertise of support staff and time to resolution.

Cautions

The Prognoz platform is considered to be the enterprise standard in only 60% of reference organizations that responded to the survey, which is somewhat surprising given the range of functionality that it delivers. However, 37% of Prognoz references indicated that their organization has no enterprise standard BI platform, which may indicate that full-scale deployment of all components of the platform is a work-in-progress for the customers of Prognoz.

While the Prognoz platform delivers strong data integration capabilities through its built-in ETL, primarily used by developers to prepare data for analysis, its support for business-user-oriented data mashup was identified as a weaker platform capability — contributing to an overall lower product score for a decentralized deployment use case, where mashup capabilities are weighed heavily. Prognoz's lower score for a decentralized deployment use case was also impacted by the relatively

weak collaboration and social capabilities offered within its platform.

According to the survey, Prognoz customers report that they generally deploy 12 IT full-time equivalents to author BI content and administer the platform and support users, which is slightly higher than the overall average for the vendors in this Magic Quadrant and is compounded by the smaller-than-average deployment size reported by references — 836 versus an overall average of 1,554. Potential buyers should note, however, that the Prognoz platform includes a data management layer (ETL and database) which may explain the need for a slightly higher number of IT full-time equivalents compared with other BI vendors that do not offer fully integrated information management and analytic capabilities within their platform. It should also be noted that Prognoz typically requires a significant services engagement to set up and deploy the platform, which should also be considered when evaluating ownership cost.

While support is a clear strength related to customer experience, some other key components related to customer support — product quality and migration difficulty — were not rated as highly by Prognoz's survey references. Customers rated it as slightly more difficult to migrate than the overall average, and product quality was rated only slightly above the overall average.

Pyramid Analytics

Pyramid Analytics is an emerging and well-funded vendor positioned as a Niche Player for the second consecutive year. Targeted primarily at customers using the Microsoft BI stack, its platform, BI Office, is a Web-based, end-to-end BI platform offering a range of analytic capabilities for self-service BI, interactive analysis and visualization, while keeping all data and metadata within the BI Office repositories to support governance. BI Office is an integrated platform for relational in-memory or multidimensional analysis and visualization. The suite incorporates: Data Discovery (formerly bioXL) for ad hoc querying, OLAP analysis and interactive visualizations; Dashboards (formerly bioPOINT) for dashboards and KPI scorecards; and Publisher (formerly bioWRITER) for report publishing, alerting and distribution. Advanced analytics needs are addressed with a newly introduced integration of R, which replaces the previously announced bioMINER module. BI Office Online, which was introduced during 2014, is a public cloud offering that delivers the same end-to-end BI functionality as the on-premises platform.

Pyramid Analytics' strong customer experience scores, and its product and vision for governed data discovery are key drivers of its Magic Quadrant placement.

Strengths

Functionality was the primary reason for selecting BI Office, followed by ease of use for developers as well as end users and implementation cost and effort. In line with that perception, survey respondents scored Pyramid Analytics as above average with respect to handling complex analysis, overall ease of use, and business benefits achieved. Pyramid Analytics users report it as having the fastest time to create simple, moderate or complex reports and dashboards of any vendor in the Magic Quadrant.

BI Office offers an end-to-end platform with a common interface. This is the key strength of the platform and Pyramid Analytics achieved among the highest scores for traditional style of analysis and platform integration, as well as for enterprise features for BI platform administration, metadata management, IT-developed reports and dashboards and cloud deployment. The platform received aggregate above-average marks for centralized, governed data discovery and embedded use cases.

This year, customers revealed improvements in product quality, which was an issue last year. This, in addition to the comprehensive analytic capabilities and newly introduced features, might be the reasons why approximately 42% (third highest overall) of customers changed their mind from last year and now feel more positive about Pyramid Analytics' future.

While Pyramid Analytics came late to supporting mobile BI, it now offers native support for Microsoft, iOS and Android. The high demand of its customers, as expressed in last year's survey, turned into 31% of respondents now actively using mobile BI (a percentage in the top quartile of active usage).

Cautions

Pyramid Analytics started approaching "governed data discovery" with BI Office. Business users using the bioXL module can use Mash-Pit for self-service data mashup on data sources that have been added to the platform as a data source, and interactively explore the data. However, these business-user data mashup capabilities are rated lower than other features — with minimal data inference, profiling and enrichment capabilities.

While mobile use is high relative to other vendors in this Magic Quadrant, the capabilities for it and for collaboration, which were significantly enhanced (including timelines and seamless integration with third-party social networks such as Yammer and Chatter) are rated lower than the overall average.

The primary problems stated by survey respondents are reliability and stability issues, indicating that Pyramid Analytics still has room for improvement in that respect. As the customer base and number of users are growing, Pyramid Analytics should also place more emphasis on improving user enablement — where it earned a below-average score overall.

Although it is expanding its strategy, Pyramid Analytics' predominantly Microsoft-centric approach continues to be a risk for future growth as Microsoft invests heavily in enhancing its own BI capabilities. It is also a potential limitation for Pyramid Analytics in expanding its footprint in large enterprises.

BI Office deployments are most likely to be largely used by SMB customers, or in departmental deployments at large enterprises. This is indicated by the average number of users, which is 451 compared with this year's average of 1,554 users, although the number of users grew by a factor of three compared with last year. The same holds true for data volume accessed, which has more than doubled and is now slightly above the average. Prospective customers looking for large-scale deployments should check Pyramid Analytics' references.

Qlik

Qlik is a market leader in data discovery. It sells two products, both based on an in-memory associative search engine. QlikView is a mature, self-contained, tightly integrated development platform used by IT or more technical users for building intuitive and interactive dashboard applications faster and easier than traditional BI platforms. Qlik Sense is a new platform (released during September 2014) that gives business users the ability to build their own dashboards while giving IT the ability to govern, manage, scale and embed them.

Qlik's position as a Leader in this Magic Quadrant is driven by strong vision around governed data discovery with the introduction of Qlik Sense and high level of market understanding, but execution around customer experience (particularly support) and the sales experience — combined with slower market momentum, particularly in the run-up to the Qlik Sense release — are concerns. Following the Qlik Sense release, interest in Qlik seems to have rebounded. During 2015, for continued momentum, Qlik must refocus on the customer experience as it transitions to effectively selling two products and matures Qlik Sense's functional capabilities through its newly introduced agile point release schedule (that is, three per year).

Strengths

Qlik offers a highly interactive dashboard development product portfolio that spans business-user self-service, centralized dashboard application development, and IT needs for enterprise features to support governed data discovery. Qlik made the bold decision to invest in Qlik Sense, a completely new platform, to enhance its enterprise features and deliver on governed data discovery. Even though Qlik Sense is new to the market, with still limited adoption to date, Qlik has the highest percentage of survey customers (mostly using QlikView) reporting that they use the platform for governed data discovery. Qlik continues to build differentiation into the platform through both internal development and strategic acquisitions (for example, NComVA, DataMarket and NPrinting).

Ease of use, particularly for dashboard consumers, is a key reason customers report buying Qlik, in addition to low implementation time and effort — particularly compared with traditional BI platforms. Qlik also enables users to conduct a broader range of more complex types, of analysis — through intuitive interactive discovery — than most vendors in this Magic Quadrant. This combination has been a key driver of its success. Qlik offers free desktop versions of both of its products and this freemium model gives users a risk-free way to try out the product. Consistent with its use and reasons for purchase, Qlik scored well on analytics dashboards (responsive design and storytelling), free-form exploration (associative, smart search) and mobile — in support of both decentralized and governed data discovery use cases — both platform strengths.

Qlik has shown an increased penetration into the enterprise from last year. Although Qlik's average deployment size is at 791 users, below the overall average of 1,554, more than 62% of Qlik's customers consider it to be their BI standard (versus around 50% last year) and customer references report that it is among the top five in terms of being deployed broadly across departments and enterprisewide. As Qlik Sense is more broadly adopted, enterprise penetration should increase.

While many aspects of customer experience (see Note 3) declined, user enablement and availability of skills are exceptions. Reference customers rate Qlik in the top five for user enablement, which includes documentation, online training, tutorials, user communities and conferences, and for wide availability of skills. A particular strength is the Qlik Community, which offers an online collaboration hub and center of excellence for prospects, customers, partners and employees.

Partners, including SIs, resellers and now OEMs, have been more instrumental in Qlik's global awareness and growth strategy than for any other BI or stand-alone data discovery vendor. Qlik Sense's emphasis on open APIs should expand the opportunities for partners to build value-added applications with the platform.

Cautions

Qlik offers two products with two different pricing models. While this dual product and pricing strategy expands options for customers, it may also be confusing as they try to decide when to deploy Qlik Sense versus QlikView, or in combination; how the different pricing models are managed and affect overall cost; and how and when to migrate. BI buyers will need to invest time in understanding the differences and to assess fit with their requirements.

Qlik Sense is a new, 1.0 product and platform that has a number of differentiators over QlikView and the rest of the market (for example, storytelling, smart visualizations and smart search), but is also a work-in-progress in a number of functional areas. This will result in limited adoption of Qlik Sense while Qlik enhances its capabilities to support interactive exploration for the business analyst, to be more competitive with other data discovery tools; and to extend its capabilities for advanced dashboard applications, to be more comparable to QlikView for those customers that want to move to Qlik Sense as their single platform. A focus on maturing the Qlik Sense platform may limit Qlik's bandwidth to invest in more forward-looking capabilities (such as smart data discovery, self-service data preparation, cloud and other) to differentiate/help the platform remain competitive in the future.

Qlik has not offered production reporting and its direct query to relational sources capabilities (versus in-memory only) have not been widely adopted. Customers have had to be prepared to mix and match for system-of-record reporting. This has limited Qlik's use as an enterprise standard when a customer wants to perform both data discovery and reporting in a single platform. Product scores reflect this previous direction, with weaker ratings in IT-developed reports and dashboards and traditional styles of analysis. However, Qlik has recently acquired (during February 2015) existing partner NPrinting — a report generation, distribution and scheduling application with Microsoft Office integration capabilities for QlikView (integration with Qlik Sense is on the road map) to address this limitation. NPrinting has over 1,000 current QlikView customers. The platform also scored lower than the overall average in BI administration, metadata management (Qlik Sense is better than QlikView for both) and for business user data mashup. Self-service data preparation is a future road

map item for Qlik.

Qlik has had inconsistent sales execution during the past couple of years, potentially explained by its shift from selling to departments to supporting the needs of strategic enterprise deployments. However, this transition has taken a toll on how customers view their sales experiences with Qlik — for which it was rated in the bottom five of the vendors in this Magic Quadrant. This is often a source of concern during Gartner client inquiries. Perception of customer experience has also declined from last year, driven primarily by low customer support ratings (it was rated in the bottom four vendors). Customer experience matters to buyers, and a successful transition on both fronts is important if Qlik is to accelerate its market penetration.

Qlik has been later than a number of other Leaders to deliver a fully featured cloud offering. Qlik Sense's cloud-based sharing capabilities represent its first step. Qlik's customers put it in the top three for having no plans to adopt it for cloud BI.

Salient Management Company

Salient Management Company offers its Collaborative Intelligence Suite, which provides deep data discovery capabilities that are used by its clients for an array of analytic solutions including: revenue management, merchandising and category optimization, supply chain optimization, margin analysis, and others.

Salient is positioned in the Niche Players quadrant because it provides one dominant use case — data discovery for business analysts and power users. While Salient is strong in this area, it has only recently released a dashboard product that would increase the breadth of features in the information delivery area. Moreover, it has very limited adoption — primarily in North America — and doesn't have a large number of users in each customer site. Despite its limited growth and adoption, Salient scored particularly well on some of the key aspects of our customer reference survey.

Strengths

Salient was ranked third out of 24 vendors for overall sales experience, and first in customer experience (which is a composite score of product quality, support, sales experience, skills availability and user enablement — minus migration difficulty — see Note 3).

Salient's customers identified write-back for driver-based planning and constraint-based modeling as among its key strengths. The ability to perform in scenario-modeling and support-planning types of use cases is less common in in-memory BI products, which tend to focus on ad hoc "slice and dice" interactions. The platform rates most highly in traditional styles of analysis (OLAP and ad hoc analysis).

With its in-memory model and visual data mining capabilities, Salient offers an unfettered drilling experience, giving users control over all relevant data.

In particular, Salient is strong in the beverage and consumer packaged goods (CPG) industries, especially for revenue management applications such as those for sales forecasting and margin analysis. Recently, it has also made strides in the state government and healthcare sectors.

Cautions

Salient was ranked in the bottom quartile (of the vendors in this Magic Quadrant) for breadth of use. Even within the data discovery environment, Salient is used for traditional OLAP activity (albeit on a modern in-memory architecture) for drilling and write-back; but the platform is not meant for the increasingly dominant use case of user autonomy, self-service and data blending. Salient has recently released new dashboard and native mobile applications that could broaden its scope toward more information delivery use cases.

Salient's weakest product components are its analytics dashboards, BI platform administration, development and integration, and embedded BI, making it better suited for decentralized use cases.

Salient was ranked in the bottom four of 24 in deployment size (number of users). This is not surprising as Salient has traditionally offered an architecture primarily for power users rather than information consumers. Salient's new dashboard and mobile products are intended to increase adoption among information consumers.

For business benefit, Salient was only ranked 9 out of 24 vendors. This is surprising, given its positive results in other parts of the customer reference survey and its solution mentality. (Business benefit is a composite score of 11 survey questions.) Salient is better suited to some (such as the ability to make better decisions faster), than others (such as reducing IT head count).

Although its partner network continues to grow and has support in all major regions of the globe, Salient is still not very well-known in the market. It is primarily a North American vendor, with a limited sales presence, a small partner ecosystem and few global resources.

SAP

SAP delivers a broad range of BI and analytic capabilities: for large IT-managed enterprise BI deployments with the SAP BusinessObjects BI platform; and for decentralized data discovery deployments with SAP Lumira. This is complemented with the SAP Hana in-memory data platform. Companies often choose SAP as their enterprise BI standard, particularly if they also standardize on SAP for ERP applications.

SAP's position in the Leaders quadrant is primarily based on two aspects. SAP is investing heavily in a visionary product direction with SAP Lumira and has good product scores that have improved with the new release, and it has introduced its simplification strategy for the BI platform components. However, SAP continuously gets below-average scores in almost all areas of customer experience and business benefits achieved, and has had limited success to date in addressing business-user data discovery requirements. SAP must translate its visionary investments into momentum and an improved customer experience to remain a Leader in the future.

Strengths

SAP has continued investing in new capabilities with a number of potential differentiators. For instance: SAP Lumira's advanced self-service data preparation and Infographics features; smart data discovery, by integrating Predictive Analytics (SAP's advanced analytics platform acquired from KXEN) and Lumira; governed data discovery, by integrating SAP Lumira with SAP BusinessObjects Enterprise, and integration with SAP Hana. However, SAP's future success in gaining traction and adoption with its new capabilities will demonstrate to what extent SAP can compete successfully with data discovery leaders.

SAP product capabilities scored above average in aggregate, with a broad range of functionality and particular strengths in BI platform administration and mobile.

Survey responses show that SAP BusinessObjects BI is predominantly used for large customer deployments. The average number of users is more than twice the survey average and the third highest overall. SAP is, most often, the enterprise BI standard — as indicated by 81% of survey respondents (among the highest percentage in the survey) — often in combination with SAP business applications (more than 60% of its surveyed customers use SAP as their primary ERP system, although the company has said that new BI revenue is derived from a much lower percentage of SAP ERP customers).

SAP announced its product simplification strategy during 2014, aiming to significantly reduce the number of BI components. While this is still a work-in-progress, it is a clear sign of intent. Together with SAP's investments in SAP Lumira, this might have led 35% of the respondents to feel more positive about SAP's future (a percentage above the overall average). Furthermore, less than 8% of customers, slightly below the survey average, consider discontinuing their use of SAP's BI platform.

Cautions

Despite SAP continuing its BI Customer Success initiative, its customer experience (see Note 3) scores are among the lowest across all measures. It is also scores below average in market understanding, reflecting its ongoing struggle to meet business-user-oriented data discovery requirements in addition to meeting the requirements for large IT-managed enterprise BI deployments. Moreover, analytic dashboards are identified as one of the weaker components of the platform. SAP needs to further invest in improving customer experience within its installed base and not risk overstressing its clients' loyalty and stack stickiness.

SAP's reference customers rated it near the lowest score overall for sales experience this year. Consistent with last year, 42% identified cost as the most important limitation for wider deployment. Apparently, SAP's simplified pricing and licensing model, which was introduced during September 2014, is still early in its roll out and has not yet had a positive effect. Additionally, in Gartner's dealings with clients, SAP customers continue to raise concerns regarding additional license and maintenance costs when considering upgrading to the latest version to fully leverage all available BI capabilities.

Customers previously reported improvements in product quality and stability with version 4.1 of SAP BusinessObjects BI. However, SAP needs to continue improving product quality as its scores are second from the bottom again this year. Stability and reliability problems were identified as the top issues by the respondents; followed by absent or weak functionality as the second most important problem. SAP also rated below average in BI platform integration, which can be an additional challenge when support and product quality are an issue. SAP's BI platform is mostly used for large IT-managed enterprise BI with traditional-style analysis and reporting-centric use cases, which are related to the more basic types of analysis reported by users of the platform. SAP is also rated the second lowest across all three measures of ease of use — that is, ease of use for end users, content creation, and administration and implementation.

While SAP started to offer a number of cloud BI options, ranging from infrastructure, platform and SaaS to managed cloud as a service, it just started to get traction in comparison with cloud BI pure-play vendors.

SAS

SAS offers vast array of integrated components within its Business Intelligence and Analytics suite that combines deep expertise in statistics and predictive modeling with innovative visualization enabled by powerful in-memory processing capabilities. SAS Visual Analytics is the flagship product in the suite for delivering interactive, self-service analytic capabilities at an enterprise level — extending the reach of SAS beyond its traditional user base of power users, data scientists and IT developers within organizations. SAS also leverages its range of platform components and expertise in various industries to offer a wide range of vertical- and domain-specific analytic applications.

SAS is again a Leader this year as it continues to build momentum with SAS Visual Analytics, which was released in 2012 and has gained some traction in the market against the data discovery leaders through product differentiation and a more accessible pricing model (with a lower entry point than initially offered). SAS also continues to demonstrate very strong vision in many areas such as the expansion of both smart data discovery capabilities and embedded advanced analytics within SAS Visual Analytics, seamless navigation between SAS Visual Analytics and SAS Visual Statistics, and integration across other core analytic components of the platform in order to address enterprise requirements for governed data discovery.

Strengths

SAS was rated slightly higher for market understanding (by references) than the average for this Magic Quadrant; this is a composite measure combining ease of use, complexity of analysis and breadth of use (see Note 3). Support for complex analytic use cases is an obvious strength for SAS, but the fact that eight other vendors ranked higher for complexity of analysis may indicate that in many cases the primary product being used is Enterprise BI, which offers more traditional styles of reporting, and that penetration and adoption of Visual Analytics to address more complex use cases is a work-in-progress within SAS's BI customer base. The portfolio of products reaches a broader

range of users leveraging the platform to support use cases spanning the full analytic spectrum, which is a positive for SAS and a differentiator for its platform.

The main reasons reference customers choose SAS are functionality and product quality, which are clear strengths. SAS delivers a full range of functionality through integrated BI and analytic platform components such as SAS Visual Analytics, SAS Office Analytics and SAS BI/Enterprise BI Server (EBI) as well as complementary products used for data integration, data management, data mining and predictive modeling — all built with a focus on product quality for which SAS was rated just above the overall average.

The SAS BI and analytics platform can be deployed to meet the needs of a diverse set of use cases, as indicated by reference organizations that ranked SAS third for frequency of deployment in both centralized and decentralized BI use cases. This diversity positions SAS favorably to differentiate itself from other vendors in the market with a platform that is able to meet both the enterprise needs of IT and the self-service needs of the business.

Nearly 15% of survey references report using the integrated self-service data preparation capabilities offered by SAS to allow business users and analysts to access, integrate and transform data in preparation for analysis. The availability of integrated business-user data preparation capabilities is a differentiator for SAS compared with other data discovery vendors; particularly Tableau, which relies on third-party integration with vendors such as Alteryx, Paxata, and Trifacta to deliver this capability to its customers.

Cautions

License cost was again a concern for SAS customers in 2014 and was cited as a barrier to wider deployments by 46% of the reference organizations who responded to the survey, higher than all but one other vendor in the Magic Quadrant. It is expected that this will improve in next year's survey as customers benefit from the fact that SAS revamped its Visual Analytics pricing structure in September 2014 — to address this concern and offer its customers a per user price point that more closely aligns with competitive data discovery products in the market. With this change, SAS has also made Visual Analytics more accessible to the SMB market with a lower point of entry — four-core server license priced at $8,000, which can support up to five power users. Under the new pricing structure, the per-user license cost of Visual Analytics is more comparable to leading data discovery offerings, which is critical to SAS's goal of extending the reach of analytics more broadly within its customer base and to win net new customers.

Customers reported significant difficulty in migrating to the latest release of the SAS platform components they have deployed, as indicated by its being given the fourth-highest migration difficulty rating. While the migration difficulty rating is high (compared with other Magic Quadrant vendors included in the survey) it should be noted that the score corresponds to a rating between "straightforward" and "somewhat complex" according to the scale used in the survey. It is also likely that the complexity reported by some customers is related to platform-level migrations rather than version updates to individual products.

Support for complex use cases is a strength of the platform, but SAS references rate both overall ease of use and business benefits delivered as below the overall average. This could be because adoption of Visual Analytics, while higher than other traditional market share leaders, is still early and has yet to have its full impact on perceived ease of use; also, the most recent release of EBI, which offers usability improvements, has not yet been widely deployed. Other data discovery platforms are currently doing a better job of executing on the vision of making hard things easy and being accessible to a broader range of users, but SAS Visual Analytics is gaining awareness and traction in the market and has the potential to close the gap.

Tableau

Tableau's intuitive, visual-based data discovery capabilities have transformed business users' expectations about what they can discover in data and share without extensive skills or training with a BI platform. Tableau's revenue growth during the past few years has very rapidly passed through the $100 million, $200 million and $300 million revenue thresholds at an extraordinary rate compared with other software and technology companies.

Tableau has a strong position on the Ability to Execute axis of the Leaders quadrant, because of the company's successful "land and expand" strategy that has driven much of its growth momentum. Many of Gartner's BI and analytics clients are seeing Tableau usage expand in their organizations and have had to adapt their strategy. They have had to adjust to incorporate the requirements that new users/usage of Tableau bring into the existing deployment and information governance models and information infrastructures. Despite its exceptional growth, which can cause growing pains, Tableau has continued to deliver stellar customer experience and business value. We expect that Tableau will continue to rapidly expand its partner network and to improve international presence during the coming years.

Strengths

Tableau has clearly defined the market in terms of data discovery, with a focus on "helping people see and understand their data." It is currently the perceived market leader with most vendors viewing Tableau as the competitor they most want to be like and to beat. At a minimum, they want to stop the encroachment of Tableau into their customer accounts.

Tableau rates among the top five vendors for aggregate product score, with particular strengths in the decentralized and governed data discovery use cases. In particular, analytic dashboards, free-form exploration, business-user data mashup and cloud deployment are platform strengths. Tableau's direct query access to a broad range of SQL and MDX data sources, as well as a number of Hadoop distributions, native support for Google BigQuery, Salesforce and Google Analytics has been a strength of the platform since the product's inception and often increased its appeal to IT versus in-memory-only options. As a result, customers report having slightly below-average deployment sizes, in terms of users, but among the highest data volumes (in this Magic Quadrant).

Tableau has managed its growth and momentum well. The company has been able to grow and

scale without a significant impact on discounts extended (that is, these are very limited) or customer experience. Most technology companies struggle to manage this balance between growth and execution.

Tableau customers report among the highest scores in terms of breadth and ease of use along with high business benefits realized. Gartner inquiries and customer conversations reveal that Tableau users report an enthusiasm for the product as a result of being able to rapidly leverage insights from Tableau that have a significant impact on their business. Customers also report faster-than-average report development times.

Tableau is an R&D-driven company. It continues to invest in R&D at a higher pace (in terms of percentage of revenue — 29% in 2014) than most other BI vendors.

Cautions

Tableau has a limited product line focused on data discovery. Organizations like to buy and manage fewer software assets and vendors. At some point many of the new generation of visualization and discovery tools that are bundled with other (competitor) applications may gain traction, particularly as they roll out smart data discovery and self-service data preparation differentiators.

IT-developed reports and dashboards, traditional styles of analysis, metadata management, development and integration, BI platform administration, embedded BI and collaboration are rated as weaker capabilities of the platform, making it less well suited for centralized and embedded use cases. When Tableau customers have advanced data preparation, production reporting, advanced analytics, distribution and alerting as requirements, they have to turn to third-party products and partner capabilities. This may also limit its ability for large-scale displacements, but not for large scale surrounding and marginalizing of IT and report-centric incumbents.

Tableau is the competitive target of most other vendors in this market. It faces competitive threats from every other vendor in the market that is also focused on delivering self-service data discovery and visualization capabilities, in an attempt to slow down Tableau's momentum.

Tableau offers limited advanced analytics capabilities. R integration has been recently added and is a major improvement for users needing more statistical and advanced capabilities. Other vendors, such as SAS, SAP and Tibco, have more advanced native capabilities.

Tableau's enterprise features around data modeling and reuse, scalability and embeddability — that enable companies to use the platform in a more pervasive and governed way — are evolving with each release, but are still more limited than IT-centric system-of-record platforms.

Targit

Targit's Decision Suite offers a single, integrated and comprehensive BI and analytics platform. Decision Suite focuses on meeting IT demand with respect to data management and data governance, while attracting a wide range of end users with an emphasis on ease of use and a consistent user experience. Targit is headquartered in Denmark with offices in 12 countries, including the U.S., Brazil, Australia and India.

Targit is positioned as a Niche Player with its Decision Suite platform. Its primary market is the Microsoft customer base, with about 80% of its customers using Microsoft SQL server, ERP or CRM. Targit further strengthened its position in this market segment by enhancing its integration with Microsoft SharePoint, AX and CRM and building vertical-specific solutions together with its partner base.

Strengths

Survey responses indicate that the main reasons for selecting Targit continue to be ease of use for developers and end users, functionality as well as data access and integrations. This is in line with Targit's approach to deliver a single, integrated BI platform to meet IT as well as business users' needs.

Targit is predominately used as the centralized, largely IT-controlled BI platform. The product is rated highly for metadata management and traditional styles of analysis — it achieved the highest percentage of users (84% of respondents) deploying the platform for this use case.

Above-average scores for overall customer experience (see Note 3) and sales experience show improvements from Targit in meeting its clients' expectations. Another positive sign is an overall product quality score that is above average, placing Targit in the top third in that respect. In addition, Targit customers rated it as above average regarding business benefits achieved. Consequently, in comparison with last year, the number of customers considering discontinuing dropped from about 15% to 10% (although this is still slightly above average).

Targit has continued to invest in vertical-specific BI applications, addressing 14 different verticals. This is largely done through partners, leveraging the Targit Framework to build data models, ETL and business content for vertical-specific BI and analytic applications. Together with Targit's deep integration into Microsoft applications, this is a key differentiator for Targit. Approximately 60% of its customer base already uses these predefined vertical-specific solutions.

Targit continues to invest in the comprehensiveness of the Decision Suite platform. Targit now supports big data sources through native connections to the Microsoft Analytics Platform System. In 2014, Targit's data discovery module was extended with the introduction of some business-user data mashup capabilities through the new Targit Data Service, which includes external data sources such as Azure Data Market, OData and Quandl. A new Java thin client addresses the need for embedded BI, in particular for IoT scenarios such as deployments on Internet-enabled devices like Smart TVs, manufacturing equipment and machinery. Moreover, in contrast to last year's results, performance was only indicated to be a problem by about 5% of Targit's survey respondents. This is a sign that the newer versions of Decision Suite addressed previously known performance issues.

Cautions

Despite its investment in new capabilities, survey respondents continued to score Targit as below

average for overall market understanding. Although the product supports interactive analysis, and is rated easy to use, customers deploy Targit in more narrow basic reporting and analysis scenarios, which has led to Targit being placed in the bottom quartile for breadth of use and below average in complexity of analysis.

Targit's strong focus on Microsoft customers continues to be a key differentiator, but also a risk. Microsoft's continued investment in its BI portfolio, in particular with respect to self-service BI and data discovery capabilities such as Power BI, can threaten Targit's future opportunities to grow.

Targit's main customer base is within the SMB market. About 82% of survey respondents reported Targit as their enterprise BI standard, and the deployment sizes remain very small. The average data volume accessed is less than 10% of the survey average of 14.2TB, and the average number of users is, at 87, significantly lower than the overall average of 1,554.

Tibco Software

Tibco's BI platform consists of two distinct products covering a wide range of analytic capabilities. Spotfire is a leading data discovery and interactive visualization product that offers business users and analysts the ability to access, combine, prepare and visualize data in the form of highly interactive analytic dashboards. Spotfire also offers advanced analytic capabilities through integration with Tibco's Enterprise Runtime for R (TERR), and is a leader in geospatial, location analytics, and real-time use cases. Tibco's second product, Jaspersoft, was acquired in April 2014, to expand the platform's range of analytic capabilities beyond data discovery to include key strengths of the Jaspersoft product — embedded analytics and production reporting.

Tibco has two products that are both highly rated by customers, but continued poor execution of Spotfire in a data-discovery-led market is the primary driver of Tibco's downward move from the Leaders to Visionaries quadrant this year. While other data discovery leaders have enjoyed recent success and growth using a "land and expand" business-focused sales model, Tibco has continued to try to sell Spotfire to IT using the same enterprise sales model it has for middleware, which has so far resulted in a missed opportunity to be a major player in the data discovery space.

Strengths

Tibco delivers capabilities that cover a wide range of analytic use cases through its two primary products, Spotfire and Jaspersoft, as indicated by its positioning in the top quartile of vendors for complexity of analysis performed by users — which assesses how the platform is used by survey reference organizations with higher weight assigned to interactive and advanced analysis and lower weight assigned to static or parameterized reporting (see Note 3). This was also a factor driving customer buying decisions, with 16% of references reporting that platform functionality was the top reason for buying Tibco.

Tibco earned one of the highest aggregate product scores, largely because the assessment crossed both Spotfire and Jaspersoft — which combined have strong capabilities for both centralized and decentralized use cases, from IT-centric reporting and embedded BI through data discovery, although the platforms are not yet integrated.

Tibco, with Jaspersoft, is used to deliver analytic content to the highest percentage of external users of all vendors included in this Magic Quadrant, and has the sixth-highest percentage of references reporting that they use the platform in support of an OEM/embedded use case. This strength is also reflected in the fact that Tibco ranks among the highest in average deployment size, at 7,852 users (well above the overall average of 1,554).

Over 25% of customers report that combined ease of use for developers and end users is a primary reason for buying Tibco products. Once implemented, customers report that combined ease of use for Tibco is slightly above the overall average for this Magic Quadrant, driven largely by favorable scores for Spotfire. Spotfire scores in the top quartile for ease of use, while Jaspersoft scores in the bottom quartile.

Cautions

Tibco is composed of two separate product offerings that support very different users and use cases with little integration, but the task of bringing Spotfire and Jaspersoft together remains a work-in-progress that will take time to fully materialize. While the overall portfolio does cover a wide range of analytic capabilities, it is not clear how or when the product road maps will converge — which may cause confusion for existing customers and potential buyers. Metadata management and traditional styles of analysis were rated as weaker capabilities across the platforms.

The future of Tibco itself is uncertain, following the acquisition of the company by Vista Equity Partners (which closed in December 2014). In the near term, Tibco will operate as a privately held single entity, as it did when it was publicly traded, but the longer-term intentions of Vista are not yet clear. The ingredients for a leading BI and analytics platform are present with Tibco's many strategic acquisitions; however, Vista will need to implement major changes to address the sales model and execution issues, which have plagued Tibco historically, in order to regain traction and once again be recognized as a market leader.

Tibco has struggled with the market positioning and sales execution of Spotfire since it was acquired, which is reflected in Tibco's sixth-from-bottom ranking (across the vendors in this Magic Quadrant) in sales experience, and also a sharp decline in buyer interest as indicated by the lack of inquiries and contract reviews for both Spotfire and Jaspersoft.

Customer support and user enablement were both rated poorly by Tibco's references, which ranked them below the average overall and for the individual components within each category. User enablement is of particular concern, being ranked fourth from the bottom; this is in stark contrast to its data discovery competitors, Tableau and Qlik, which were both ranked in the top five in this category.

Yellowfin

Yellowfin delivers a set of innovative capabilities in collaboration features, storytelling and mobile, and a tightly integrated set of tools — from data integration to dashboards. Founded in Australia in 2003, Yellowfin is a BI vendor that continues to invest in a user-friendly interface to empower business users.

Yellowfin is positioned in the Niche Players Quadrant of the Magic Quadrant. Collaboration and social BI, mobile and location intelligence have been successful ways to differentiate its platform from competitors.

Strengths

Customers report the third-highest percentage of cloud deployments in a public cloud (after the two cloud specialists in this Magic Quadrant — Birst and GoodData) for this vendor, and the highest for deployment on a private cloud. Organizations planning to adopt a cloud-based BI strategy should consider Yellowfin as an option.

Embedded BI represents an important share of its revenue and customer base, with the product being incorporated by partners as part of their own applications. A tightly integrated platform and extensive APIs support this line of business for the vendor. As a result, Yellowfin receives high scores for the OEM use case. Collaboration and mobile capabilities are rated as particular platform strengths.

The average report development time is 3.2 days, faster than the overall average of 4.0 days for the vendors in this Magic Quadrant — a positive outcome for a vendor trying to empower business users. This is consistent with its above-average ratings for ease of use.

Yellowfin has the highest number of business users for each IT content author — a ratio of 44:1, while the average in the Magic Quadrant is 15:1. This strong result represents reduced operation costs for customers and should be factored-in when comparing the total cost of ownership of different BI and analytics platforms. This result also confirms that the product is used extensively for centralized deployments that serve report and dashboard consumers.

Cautions

Customers report that problems with product quality is an ongoing concern. This is even more relevant knowing that Yellowfin often deals with business units and SMBs that may lack the IT resources necessary to solve software problems.

Yellowfin is pursuing a product strategy of empowering business users through easy-to-use tools. This market positioning will be enhanced, going forward, with the release of data discovery capabilities to complement the existing dashboard's capabilities. This gap in the platform impacts negatively on the scores for decentralized use of BI, compared with the results of other vendors.

Customer reference scores put Yellowfin in the bottom five vendors in this Magic Quadrant for the average number of users (at 323) and the bottom three for average data volumes (with 652GB), per customer deployment. It also earned performance scores that are near the bottom. When combined, these three metrics raise concerns about the platform's scalability. Prospective customers should run proof-of-concept processes to validate whether Yellowfin can deliver in line with their requirements. It should be mentioned though, that the company is able to present references of very large deployments — showing us that under the right infrastructure and workload scenarios, the solution can scale adequately,

Yellowfin still has a limited geographic presence compared with other established vendors and needs to expand if it aspires to move beyond the Niche Players quadrant. To address this challenge, the company continues to invest to grow its direct presence and partner network — it currently has more than 250 partners worldwide. Moreover, it has now direct or indirect representation is Asia, Europe, the U.S., Latin America and Africa.

Vendors Added and Dropped

We review and adjust our inclusion criteria for Magic Quadrants and MarketScopes as markets change. As a result of these adjustments, the mix of vendors in any Magic Quadrant or MarketScope may change over time. A vendor's appearance in a Magic Quadrant or MarketScope one year and not the next does not necessarily indicate that we have changed our opinion of that vendor. It may be a reflection of a change in the market and, therefore, changed evaluation criteria, or of a change of focus by that vendor.

Added

Datawatch was added to the Magic Quadrant this year. It met all of the inclusion criteria and was ranked in the top 24 of assessed vendors because of its differentiation in supporting emerging requirements for data discovery on streaming and multistructured data.

Dropped

Arcplan, Bitam and Infor were excluded from the Magic Quadrant this year because they did not meet all of the inclusion requirements. Exclusion this year does not mean they will not be considered in future years.

Jaspersoft was acquired by Tibco. The position of the Tibco dot on this year's Magic Quadrant reflects an assessment of both Spotfire and Jaspersoft.

Other Vendors to Consider That Did Not Qualify for Inclusion

A number of interesting vendors participated in the Magic Quadrant process (with most identifying reference customers and providing information), but did not meet the criteria for inclusion in the Magic Quadrant itself. These vendors fall into the following categories:

Real-time process and operations intelligence

Hadoop-based data discovery

      Collaborative decision making, collaborative BI and collaborative performance management

      Integrated BI and corporate performance management

      Cloud BI

      New approaches to big data

      Smart data discovery and natural-language generation

      Search-based data discovery

      Link/graph-based data discovery

      Data discovery

      Self-service data preparation

      Other BI platform vendors worth considering

Real-Time Process and Operations Intelligence

Analytics for data of different velocities (real-time and batch) are an increasingly important driver of value from big data, particularly as demand for analytics applications that require combining streaming data with historical data — for a range of high-value applications (including operational intelligence, cybersecurity analytics, process intelligence and Internet of Things applications, such as preventive maintenance and asset optimization) — becomes more mainstream. Kofax and Splunk (mentioned here) as well as Datawatch and Tibco (Spotfire) support these emerging requirements.

Kofax (Altosoft)

Kofax acquired Altosoft in February 2013 to add process intelligence and embedded analytics to its application stack. While Altosoft's code is packaged as Kofax Analytics, the vendor continues to operate as a wholly owned subsidiary, directly selling its Insight 5.0 platform. Insight provides a single integrated platform from data integration, to in-memory data storage, to dashboard delivery with no coding or scripting required. Unlike most BI tools, Altosoft Insight is process-aware. Insight provides an understanding of an entire business process to pinpoint process steps in which waste, loss and inefficiencies are taking place. This includes processes that span multiple systems of record. No business process management, workflow or process modeling tools are required. During the past year, Kofax grew from 500 to 700 customer organizations with strong practices in the healthcare and financial services verticals. In Insight 5.0 (its latest release) Kofax has added continuous simulation predictive analytics for process intelligence and has rewritten the platform to entirely support HTML5, eliminating previous Microsoft Silverlight dependencies. Another innovation is Kofax's patent-pending MapAggregate distributed in-memory architecture that overcomes the problem of being limited to the RAM of a single physical server. Now, Altosoft Insight can distribute in-memory data across multiple servers.

Splunk

Splunk has a unique set of capabilities and differentiators compared with other BI/analytics platform vendors in the market. The focus for Splunk is the management and real-time (as well as historical) analysis associated with high-volume, high-velocity and highly variable data that are typical of machine datasets/streams. It has the ability to collect, index, model, store and explore/analyze/visualize data from multiple machine-generated data sources as well as network data. Splunk enables correlation across multiple data sources including mobile data, supports schemas on the fly and has universal data forwarding capabilities. There's no back-end relational database management system and no need to filter then forward data. Splunk also supports the ability to perform data mashups across structured data in relational databases and machine-generated data. Support for an Open Database Connectivity (ODBC) interface enables delivery of machine data from Splunk to visualization tools.

Typical Splunk customers span multiple segments, such as healthcare, finance, government, online gaming and media, and use its products for a variety of use cases: security analytics, IT operations analytics, IoT analytics along with business analytics. Splunk has a unique pricing model, in the business analytics market anyhow, based on daily index volume. Splunk does not price by nodes/CPUs/users/servers; these elements are unlimited in the Splunk pricing model. As a part of the upcoming Hunk 6.2 release, Splunk's analytics product for data stored in Hadoop or NoSQL data stores, customers can purchase Hunk on an hourly consumption basis (running in AWS). Because of its real-time capabilities and ability to integrate a unique class of data with structured data sources, Splunk is often already deployed in an organization for operational use cases and used alongside to complement, rather than replace, existing BI and analytics platform investments.

Hadoop-Based Data Discovery

The ever-increasing amount and diversity of data has given rise to the need for and use of NoSQL databases, such as Hadoop (increasingly leveraging Spark) to store, manage and query large amounts of data economically. However, the rarity and the specialized nature of the skills needed to manage Hadoop clusters, generate MapReduce queries and find insights in these new sources of data have inhibited mainstream adoption, particularly among business users. Hadoop-based data discovery enables business users to explore and find insights across diverse data (such as clickstreams, social, sensor and transaction data) that is stored, managed and processed in Hadoop, increasingly with Spark. It enables users to directly query the Hadoop Distributed File System (HDFS) without the extensive modeling required by traditional SQL-based approaches, the specialized skills to generate custom MapReduce, Hive or Pig queries, or the performance penalty and lack of interactivity of querying Hadoop through Hive. Platfora, Datameer, FICO (which acquired Karmasphere) L-3 and the Eligotech are Hadoop-centric data discovery vendors whose tools are designed to address this challenge. These companies are banking on Hadoop with Spark increasingly supplanting the data warehouse as the primary data management repository and platform within enterprises. We believe that, for the foreseeable future, Hadoop and other NoSQL data stores are more likely to complement the systems-of-record data warehouse. A range of vendors are emerging to address requirements for data exploration on Hadoop. These include database and data warehouse suppliers (such as IBM, Microsoft and Oracle, which just released is Oracle Big Data Discovery platform); BI companies accessing Hadoop through Hive and HBase or though native integration with

HDFS (like Pentaho and MicroStrategy); and Hadoop distribution vendors themselves (like Cloudera Impala) that are attempting to make SQL more accessible and "performant" against Hadoop. Emerging standards and vendor support for Spark are also enhancing platform capabilities for interactive exploration.

Datameer

Datameer provides a big data analytics platform. Built to work natively within Hadoop, Datameer provides integration, data preparation, analytics and visualization capabilities with the promise of no coding and a familiar spreadsheet interface. Datameer optimizes analytical computations based on the analytics tasks, available system resources, and attributes of the datasets. The company provides an integrated environment designed to work with a Hadoop repository (customers can pick their own distribution); point-and-click data integration; a spreadsheet interface with prebuilt functions for data cleansing, transformation and analysis; a visual drag-and-drop environment to build and deliver dashboards and infographics; prebuilt applications capable of performing automated analytic processes (such as building a customer segmentation or finding correlated products); and drag-and-drop data mining algorithms. By using a native Hadoop engine instead of translating SQL through Hive, the product is able to handle large data volumes and use unstructured and semistructured information from data sources such as mainframes, databases, file systems, cloud services, social media and log files. Although relatively young, the company has strong reference customers and has built an interesting network of technology partners. With Datameer 5.0, the vendor introduces a more intelligent execution engine that leverages Hadoop's Yarn and in-memory processing to dynamically select the optimal compute framework for each step in the analytic process.

Eligotech

Eligotech released its Hadoop-based data integration and search-based data discovery platform in 2Q13. Its core product, Harpoon, hides the complexity of Hadoop by enabling users to search, navigate and analyze data directly via a Google-like interface. Data can be imported from any relational database and from data sources of any structure. While the platform offers a set of visualizations, the extensible platform is built on top of Hadoop APIs and provides a full set of REST APIs to support integration with external applications, such as the workflow management systems and BI tools on which organizations may have standardized. Although relatively new code base, Eligotech produced two significant releases this year: Harpoon 2.5 (released in July 2014) bolstered Eligotech' security by enabling better authorization on data and operations; and Harpoon 2.6 (released in October 2014) provides a visual data lineage capability, job scheduler, on-chart drill down, and ensures that the underlying HDFS permissions will be used in all Harpoon sessions.

FICO

FICO is a well-known provider of advanced analytics software and services. It acquired Karmasphere in April 2014, and is bringing it to market as FICO Big Data Analyzer, a product that is part of its Decision Management Suite. This native Hadoop application for analysts and business users, provides access to big data and enables data transformation, exploration, analysis and discovery of insights. The inclusion of data management, visualization capabilities and advanced analytics features creates an integrated analytics environment that will appeal to regular business users looking for self-service capabilities in analytics, but may also be used by data scientists for first-level insight generation. The outputs of the tool can also be embedded in business applications through the capabilities of FICO Decision Management Suite. Use cases for this technology range from credit scoring, banking originations, new customer onboarding and fraud detection, among others. In its first releases, Big Data Analyzer is helping FICO expand the types of decision management solution to include a broader set of use cases. Over time, it plans to help extend access, transformation, analysis and visualization of big data sources to a broader range of business users — beyond FICO's traditional customer base of statisticians and high-end data scientists.

L-3

L-3 acquired Data Tactics in 2014. Its Big Data Ecosystem (BDE) is a cloud, Hadoop-based data discovery platform that enables users to quickly and efficiently fuse vast amounts of data from disparate structured, unstructured and semistructured sources. Its business-analyst- and data-scientist-oriented user interface allows users to conduct geospatial analytics, interactive visualization and data exploration, and predictive and prescriptive analysis leveraging its R integration. BDE currently provides federal government customers, including intelligence agencies, with data fusion and intelligence in a secure platform featuring National Security Agency (NSA)-grade security. It also has customers in the energy and oil, financial services and telecom industries.

Platfora

Platfora, is a well-funded startup that made its big data analytics platform generally available in March 2013. The platform enables business analysts to conduct multistructured data exploration on very large datasets in Hadoop. Platfora directly accesses the Hadoop file system without needing specialized skills to write custom MapReduce, Hive, Pig or SQL queries, and then exposes the raw data in memory "lenses" so that users can identify and interactively explore the data in their Hadoop clusters. Platfora leverages both MapReduce and Spark to execute processing of raw data in Hadoop and its own columnar data store and engine to execute real-time queries in-memory. The ability to access non-Hadoop data sources using connectors is new in 2014. Platfora also provides business user tools for visualizing and interacting with data in dashboards and in autorecommended best-fit interactive charts for data discovery with a focus on customer analytics, security analytics and the IoT use cases. Platfora continues to extend the platform with additional embedded advanced analytics capabilities (such as advanced segment, behavioral, geospatial and graph analysis), including enabling users to identify entities of interest and their relationships (such as which customers bought product X and then product Y) within a certain time period, and then to iteratively segment them in order to find further patterns in their behavior. Platfora is enhancing its native on-Hadoop self-service data discovery and smart data preparation to reduce the time to insight for the analyst and data scientist accessing data in Hadoop.

Collaborative Decision Making, Collaborative BI and Collaborative Performance Management

Collaborative decision making and collaborative and social BI offers potential to finally close the gap between BI and decision making by facilitating intelligent collaboration, sharing and capture of the interactive decision process to enable more transparent, high-quality decisions. Many BI vendors in this Magic Quadrant (such as Panorama, Qlik, Tableau and Yellowfin) include collaboration and storytelling as key features of their products. Decisyon offers a collaborative decision-making platform that was built from the ground up, along with integrated BI and performance management. As a result, it is taking an innovative approach.

Decisyon

With recent funding and an expanding team of seasoned BI executives and professionals, Decisyon is expanding beyond its traditional European customer base, with a focus on North America. Its core product, Decisyon 360 unifies collaboration, social, analytics, planning and execution in a unique collaborative and social BI and analytics platform. Underpinning its differentiated approach is a smart social and data environment known as the "social workspace," where users collaborate on data, tasks, decisions and analytic content, with native and integrated mobile workflow, planning and execution as part of the BI and analytics and performance management process. It also features embedded data integration (supporting structured, unstructured and streaming data). Decisyon offers its Decisyon 360 platform for the development of custom collaborative BI and performance management applications. It also sells packaged solutions for operational BI and process intelligence, planning and intelligent manufacturing operations, and supply chain. Its social CRM product provides social media intelligence and is extensible into enterprise social customer care and marketing. It is also well-suited for IoT applications. Partners have also built solutions for the banking and financial services, telecom, life sciences, pharmaceutical, retail and automotive industries using the platform and it is expanding its relationships with system integrators. Decisyon's multitenant architecture can be deployed on customers' premises or in the cloud — as a complement to enterprise BI and performance management platforms, when analytics and performance management-centric collaboration and social capabilities are required; or as a complete end-to-end solution for enterprise collaborative BI and performance management.

Integrated BI and Corporate Performance Management

Adaptive Insights

Adaptive Insights offers a 100% cloud-based platform combining BI and CPM capabilities through its comprehensive Adaptive Suite platform consisting of five key elements: planning, discovery, consolidation, reporting and integration. Adaptive Insights targets the suite at business users and has leveraged a "land and expand" approach to sales execution that has grown its customer base by 32% since 2013 (to greater than 2,500 in 2014). In October 2014, Adaptive Insights announced the addition of Adaptive Revenue which extends the capabilities of the suite to include revenue planning and sales analytics. The addition of Adaptive Revenue, with its integration with Salesforce and ERP systems, enhances the ability of the suite to deliver a 360-degree view of business performance that enables customers to manage the entire revenue life cycle.

arcplan

arcplan's unified BI and performance management platform incorporates a complete set of BI platform capabilities, along with budgeting, planning and forecasting. arcplan has two major support centers in the U.S. and Germany. The arcplan 8 platform is composed of three components: arcplan Enterprise for reporting, dashboards and scorecards; arcplan Edge for budgeting, planning and forecasting; and arcplan Engage for ad hoc analysis and interactive exploration — which includes arcplan Excel Analytics. With the introduction of HTML5 to the platform, arcplan applications are available on mobile devices too. arcplan started to offer support for R in 2014, to address the growing demand for embedded advanced analytics. It is expanding beyond its deep heritage as a BI provider within the SAP installed base by extending its native support to other data sources. The platform provides native APIs for SAP BW and SAP Hana, as well as IBM Cognos TM1 and Oracle Essbase, to exploit the information in megavendors' systems (with the potential for a lower total cost of ownership). Positioned as a complementary front-end for information delivery, arcplan's offering also supports systems such as Microsoft SQL Server and Microsoft SQL Server Analysis Services, plus those from Teradata and Kognitio, among others. The company has extended its support for data sources during 2014 by adding Salesforce (for CRM) and LucaNet.

Bitam

Bitam offers an integrated enterprise performance management platform that spans traditional BI capabilities (Artus), financial planning (Ektos), and strategic planning (Stratego) in a unified solution suite. Customers choose Bitam because of its integrated BI and performance management capabilities and its ease of use. Bitam's cloud offering, KPI Online represents the vast majority of new business opportunities for Bitam versus its on-premises offering. Bitam continues to invest in cloud computing initiatives, including the creation of prebuilt vertical-market solutions that appeal primarily to the small or midsize business (SMB) market, which is most receptive to cloud deployment options. Bitam's customer base is heavily concentrated in Latin America, though expansion into Western Europe (particularly Spain), North America and Asia continued in 2014. However, the vendor is not well known outside Mexico and South America, where most of its customers are concentrated.

Jedox

Jedox offers an integrated platform (Jedox 5.1) for reporting, planning, and analysis. With offices in Germany (Freiburg, Frankfurt and Düsseldorf), France (Paris) and the U.S. (Boston), Jedox is now running in over 1,200 organizations and used by over 100,000 users. The Jedox platform is based on an in-memory OLAP database for reporting and planning. Data is loaded into the OLAP engine from transactional systems using the Jedox integration offering. The platform is architected to support three front ends: Microsoft Excel, Web and Mobile. The Microsoft Excel add-in front end is the most widely used but all three support write-back. Only 15% of Jedox customer references mention poor performance as an issue. To bolster performance with high volumes of data Jedox supports Nvidia Graphic Processing Unit

(GPU) technology for ultrafast aggregations. In addition to the blending of planning and analysis with true write-back functionality and the in-memory engine, another differentiator of the Jedox platform is its integration with Microsoft Office — in particular its ability to convert Microsoft Excel workbooks into multidimensional OLAP data cubes with reusable ETL processes (data-driven modelling). Overall, Jedox is used fairly narrowly within organizations against small data volumes, which suggests that it is usually deployed departmentally in larger organizations. To spark greater adoption and user growth Jedox released a managed cloud service in July 2014.

Cloud BI

Cloud BI is an emerging trend that will likely be accelerated by the entrance of Salesforce into the market and greater investment by traditional on-premises vendors. Vendors such as Chartio, DataHero and the well-funded startup Domo also offer solutions to address this growing requirement.

Chartio

Startup Chartio offers a cloud-based solution targeted at business users. It tries to address the need for easy-to-use tools capable of blending data from multiple data sources and producing dashboards without IT support. The range of data sources includes options such as: Amazon Redshift, Google BigQuery and Windows Azure Cloud, for cloud-based data; as well as databases such as Microsoft SQL, Oracle, MySQL and PostgreSQL, for on-premises data. It also offers connectivity to data sources such as Google Analytics, Salesforce, Stripe, Twilio and Zendesk. The software hides the complexity of integration with data sources, creating what the company calls a metadata warehouse and allowing the use of a simple drag-and-drop interface to produce dashboards. Although growing fast, Chartio is still a small vendor with limited geographic reach, but the cloud nature of its offering may help overcome this limitation and expand faster than traditional on-premises vendors.

DataHero

DataHero launched its self-service cloud-based analytics platform for cloud-based data sources in 2013. It is designed specifically to empower business users to be able to import and combine data and create charts without any prior technical background. The platform's built-in Data Decoder automatically detects the data structure and suggests optimal visualizations for the user based on the data. DataHero has prebuilt connectors to many enterprise cloud services and technology that automatically normalizes the data across those services, eliminating the need for custom ETL. Using DataHero, users can create visualizations, pin them into dashboards and do advanced analytics (initially cohort analysis) using drag and drop. Charts include icons that indicate the lineage of each chart. DataHero is mostly used by departments and SMBs, with an average deployment size of 10 users and largest deployment size of around 100 users.

Domo

Guided by a group of seasoned executives mostly from Omniture, Domo is using its substantial funding ($250 million to date) to build a cloud BI platform with a focus on dashboards targeted at making it easier for business users to find insights in their data and share and collaborate on findings, particularly on mobile devices. The company primarily sells to LOBs, where it offers LOB-specific packaged dashboard components and applications. The platform features point-and-click data mashup capabilities and connectors for more than 100 data sources, with native integration to a broad set of applications and to Salesforce, which is one of its most popular connectors. The company has been very secretive, with initial releases of the product to date requiring customers to sign nondisclosure agreements to view and try the product. This should change in April 2015 when the company has its official public launch. Domo is launching its product into an increasingly crowded cloud BI market that now includes Salesforce, early startups and now on-premises vendors that are investing heavily in the cloud. Selling into the Salesforce installed base has been a strong opportunity for this company.

Salesforce

Salesforce entered the BI platform market in October 2014 with its launch of Salesforce Analytics Cloud (Wave). The introduction follows Salesforce's acquisition of EdgeSpring, two years of development, and several earlier analytics initiatives. The platform offers an alternative to traditional BI platforms for customers willing to consider cloud deployment. It is most likely to appeal to customers who have most of their data in the cloud and want to augment it with on-premises data, including unstructured and semistructured data such as log data for customer-centric applications. The new platform's search index architecture enables customers to integrate Salesforce with non-Salesforce cloud and on-premises data from multistructured sources, although customers must still load data into the cloud rather than accessing it in place (which may be an inhibitor for enterprise buyers). Some of the cloud BI vendors — Birst and GoodData in particular — have a more robust and mature set of product capabilities than Salesforce's initial offering. The first release lacks certain features of data discovery and some traditional BI platforms — such as advanced data exploration for the business analyst, and geospatial and self-service data preparation, among others. Wave does, however, offer standard point-and-click interactive visualizations, dashboards and analysis that form the basis of packaged, closed-loop, front-office analytic applications. The platform is natively mobile, with an emphasis on smartphones (rather than tablets) and collaboration, which should appeal to a front-office LOB buyer. Salesforce Analytics Cloud has a robust partner ecosystem, that includes many ETL, predictive analytics vendors, and system integrators, and is also natively integrated with Salesforce security, metadata and collaboration, which should appeal to customers in the Salesforce installed base.

New Approaches to Large Data Volumes

Handling an exponentially growing volume of data is not a new problem for BI professionals, but it has become a significant hindrance to deriving insights for all relevant data assets as the type and number of sources available for analysis grow exponentially. Vendors such as Sisense are trying to find new ways to address this challenge.

Sisense

Sisense offers an integrated, performance optimized end-to-end platform that empowers business users to join and analyze large datasets and share insights via interactive dashboards through a drag-and-drop browser-based interface. Sisense uses its In-Chip and ElastiCube technologies to deliver scalability and performance that exceeds in-memory technology capabilities. Sisense has gained traction in the market through rapid expansion both in terms of new clients and increased utilization in existing accounts. This has resulted in the tripling of its revenue for the fourth consecutive year in 2014. Version 5, released in April 2014, accelerated adoption within the Sisense customer base and generated significant net new business with the introduction of in-browser authoring, a new user experience, real-time collaboration and improved mobile capabilities. Sisense released version 5.5 in August 2014, to bolster the platform's enterprise features around security, load balancing and high availability, to satisfy IT requirements and promote more widespread adoption and acceptance as an enterprise standard BI platform. In order to accommodate the rapid growth it has experienced in recent years, Sisense moved its North American headquarters to a new Wall Street location and doubled the size of its R&D center in Israel. Sisense received $30 million in Series C venture funding during June 2014. This should help the company build on its success, and expand its awareness and presence in the BI and analytics market.

Smart Data Discovery and Natural-Language Generation

Smart data discovery facilitates the discovery of hidden patterns in large, complex datasets, without building models or writing algorithms or queries and helps users focus on what insights are most important. It goes beyond data discovery because less-skilled data scientists (citizen data scientists) can benefit from advanced analytics (to highlight and visualize important findings, correlations, clusters, links or trends in data that are relevant to the user), with user interaction and exploration via interactive visualizations, search and natural-language query technologies. Natural-language generation is also being used by Automated Insights, BeyondCore and DataRPM to assist business users in focusing on relevant insights and interpreting the results for them in their context. The combination of smart data discovery and natural language query and generation is likely to have a significant impact on the next generation BI user experience and the market in general.

Automated Insights

Automated Insights' product, Wordsmith, is a patented natural-language generation engine for transforming structured data into a narrative with actionable insights. Automated Insights believes that data visualizations don't tell the full story. Wordsmith dynamically identifies the most relevant insights, patterns, context and trends in large multistructured datasets, prioritizes them based on value, and delivers a personalized narrative for each user that can be used in combination with visualizations. Style, format and even tone are configurable. Instead of creating one story for a million readers, Automated Insights can create 1,000,000 stories, each customized for an audience of one. Automated Insights has a number of high-profile clients including Comcast, Samsung, and Edmunds.com. Wordsmith publishes millions of fantasy football stories each week of the Yahoo Fantasy Football season. The Associated Press, also an investor in the company, has automated more than 4,000 earnings reports using the engine. Within a BI context, companies use Wordsmith's custom narratives to highlight the most important insights for each user, who can then access the underlying reports for more detail. Customers report that the engine makes users more efficient at finding relevant insights, as an alternative to manual analysis and as a complement to data discovery. The company reports that most of its BI customers use the product to create narratives on top of analysis done in either Tableau or SAS. Automated Insights is a cloud-based solution hosted in AWS, requiring some upfront configuration. The company has a team of data scientists that assists users with the initial tuning.

BeyondCore

BeyondCore offers highly innovative and differentiated analytics software that combines smart pattern discovery, automated insight detection and prescriptive recommendations to business users and analysts. Since it entered the market with its first product release in 2013, following eight years of R&D, BeyondCore has sought to address the shortage of data scientists in organizations — by automating the upfront analysis required to find meaning and relevance in data and allowing business users to focus on the most appropriate and actionable information. The software analyzes every intersection of data automatically, grays out statistically insignificant findings displayed in interactive visualizations and uses an animated narrative to report key findings and insights to the business user. This concept of being the "zeroth step" in analysis is a key differentiator and offers unique product positioning for BeyondCore as it seeks to build awareness and mainstream adoption in a very crowded BI and analytics landscape. Throughout 2014, BeyondCore has aggressively developed and released several product iterations, further demonstrating its understanding of the BI and analytics market and its trajectory. Most significant of these product enhancements is the addition of prescriptive recommendations based on the analysis of datasets optimizing for the outcome that a business user wants to improve. The innovative way in which the product translates analysis and insight into recommendations for action — through identification of opportunities for new revenue generation, cost reduction and risk mitigation — to deliver clear and measurable value to customers, positions BeyondCore as an extremely disruptive force in the BI and analytics market.

DataRPM

DataRPM's Smart Machine Insights data discovery platform automatically models and performs statistical analysis on data in its Hadoop infrastructure. The platform's machine-learning algorithms automatically find and deliver the most important findings and insights to users in optimized visualizations and narratives. This reduces the time, effort and skill needed for manual data discovery and accelerates time to actionable insight for a broader range of users. The system also allows business users to initiate queries and explore results using natural language. The Instant Answers computational search engine significantly reduces the need for traditional data modeling by automatically discovering and inferring semantics and entity relationships in diverse data. Any user can use Google-like natural-language query to discover and analyze the indexed data visually. Results can be shared with other users or embedded in other business applications and websites. DataRPM is aggressively updating its platform to establish an early presence in the smart data discovery space. The platform can be deployed on-premises or in the cloud.

Search-Based Data Discovery

Natural-language query technology will become an increasingly important means of delivering analytics to mainstream business users. A search index architecture is also an alternative approach to ingesting and modeling data for analysis, that reduces the time and complexity of traditional approaches. Microsoft Power BI (Q&A) and IBM Watson Analytics offer natural language query capabilities while new vendors DataRPM (featured in the smart data discovery section), Incorta and ThoughtSpot also hope to reduce time to deployment and expand user access to analysis.

Incorta

Incorta (founded by Oracle BI and Endeca product development executives), offers a search-based data discovery platform that enables business users to create analytic content from data access, mashup and aggregation to dashboard development and interactivity from an iPad or from a Web-based (HTML5) user interface. The platform supports rapid time to deployment by removing the time and complexity of traditional data integration and modeling. Its search index architecture and data ingestion technology rapidly loads large and diverse datasets by removing the need for complex ETL and data warehouse indexes, aggregate tables and star schemas — with calculations running, instead, directly against normalized data. Users build queries and refine analysis using search. Users can also upload Microsoft Excel and CSV files from email as data sources in the Incorta iPad application. The search architecture also supports the combination of structured, unstructured and semistructured data for analysis. Incorta emphasizes its enterprise features around security subsetting, scalability (customers claim they can run calculations on millions of records with subsecond performance), and governance (every action by a user is recorded). The platform also supports embeddability with a rich set of APIs. Incorta can be deployed on-premises or in the cloud running on AWS. The company has a small number of early customers that report positive results using the platform as an alternative to reduce time to insight to traditional BI platforms.

ThoughtSpot

ThoughtSpot (founded by a team of executives and engineers from Google, Nutanix, Oracle and Yahoo) introduced its search-based BI on-premises appliance product in October 2014, to make it easy for business users (not just analysts) to build reports using a Google-like search experience. In the initial version, previously modeled data is loaded and indexed in ThoughtSpot's search engine, which it calls "relational search" for access by business users. It offers users consumer experiences like pinboards (think Pinterest) to create stories with data. It also gives the user a summary of data lineage information within the business user views, including information about data sources, calculations and filters that make up the views. Customers often use the product for business-user-driven reporting as a complement to more analyst-oriented data discovery tools such as Tableau. The road map includes enhancements for data access and integration as well as to the visualization capabilities.

Link/Graph-Based Data Discovery

Large datasets have structure and relationships between entities of interest (for example, people, places, things, interactions) in the data that can be inferred algorithmically. All data within and often external to an enterprise is related in some way, but these relationships are often obscured when data is separated in different data repositories. Vendors that visually represent the links or relationships in highly dense data (link- or graph-based data discovery) are addressing this challenge by providing new ways for users to easily find hidden and relevant patterns in data. Centrifuge Systems, Palantir Technologies and SynerScope are three such vendors.

Centrifuge Systems

Centrifuge provides a link-based data discovery platform that is particularly useful for finding hidden patterns in large, multistructured, complex and often seemingly unrelated datasets. Its fully browser-based platform has the ability to ingest and unify structured and unstructured data (such as Hadoop data, documents, Web-based data and machine data), perform interactive link analysis and visualization (path identification, link-ups, bundling, animated temporal views and geospatial views), as well as capabilities that let users share and publish findings. Centrifuge grew out of the intelligence and defense communities and has expanded into federal civilian agencies and law enforcement. It is also building a commercial customer base in the financial services, life sciences (pharmaceutical), healthcare, cybersecurity and supply chain sectors. It often competes with Palantir Technologies and IBM i2, and is planning to double in size during the next year. Partners include Splunk, YarcData, MarkLogic and a number of major Hadoop distributions.

Palantir Technologies

Palantir offers a next-generation analytical platform that blends machine learning with human intuition, enabling end users to intuitively ask questions of the data using their own mental model. While it is evolving its front-end presentation skills, most of the Palantir code base is focused on solving back-end problems — integrating massive amounts of structured and unstructured data. Palantir's architecture uses several modules that complement each other. For example, Raptor is used to store hundreds of millions to billions of records of structured and unstructured data such as large repositories of articles and reports. Phoenix stores billions to trillions of records of mostly structured data such as network logs. Hercules pushes Palantir more in the direction of smart data discovery, using machine learning to investigate vast amounts of data to find unknown anomalies and associations within that data. Indeed, the variety of technology used by Palantir makes it possible to classify the vendor in one of a number of categories including Graph, Search, Hadoop, and Smart Data Discovery. Also, given that most customer engagements include approximately four weeks of implementation by a small team of engineers, Palantir could be classified as a business analytic service provider. The vendor has grown from its roots in fraud detection and national security/intelligence work to a broader array of vertical industries. This has resulted in significant growth for the company in the past few years. Palantir really isn't a competitor to most of the vendors on this Magic Quadrant; instead it is a complement and focuses on more complex analytic solutions and is therefore not seen as a mainstream analytic provider like the first generation of data discovery vendors.

SynerScope

SynerScope released its two core products, Marcato and Legato, in 2012. Marcato is a visual analysis platform that represents networks and relationships between entities in data, so that users can identify hidden patterns across structured and unstructured data without specialized skills. Entities are things such as people, places, products, transactions, events, companies, claims, policies, emails, social interactions, sentiment and files. Legato ingests data, generates metadata from both structured and unstructured files, and loads data into an in-memory database for fast interactive analysis. SynerScope can work with many leading databases; notably, it is an SAP partner and integrates with SAP's Hana in-memory database. SynerScope's initial customers are using the product for claims analysis and fraud detection in the insurance industry, as well as for analytics of mobile phone calls and cyber security. The new server version of the product (added in 2014) can be deployed on-premises or in the cloud.

Data Discovery

Advizor Solutions

A Bell Labs spinoff, Advizor specializes in interactive data visualization and predictive modeling and provides a fully in-memory data discovery engine for advanced information blending and exploration. By making extensive use of color and regression algorithms to identify information items, and employing a library of sophisticated visualizations, the tool delivers highly interactive dashboards that appeal to business users looking to find correlations, spot trends and uncover insights hidden in their data. Advizor has long been in partnership with Information Builders and HP ArcSight, both of which offer its products on an OEM basis. Advizor's direct business specializes in the fund-raising, healthcare, higher education and manufacturing sectors. Advizor is repositioning its product as a high-end discovery tool, bridging the gap between basic information exploration and advanced analytics.

Self-Service Data Preparation

Self-service data preparation platforms enable business users to reduce the time and complexity of preparing data for analysis in a governed and reusable way. They feature capabilities like visual data flow building and automation, semantic autodiscovery, intelligent joins, intelligent profiling, hierarchy generation, data lineage and data blending on varied data sources, including multistructured data. Many of these platforms also offer automated machine-learning algorithms that visually highlight the structure, distribution, anomalies and repetitive patterns in data — with guided business-user-oriented tools to resolve issues and enhance data. In addition to Alteryx and an increasing number of BI vendors focusing on this high-value capability, ClearStory Data, Lavastorm Analytics and Zoomdata offer alternatives.

ClearStory Data

ClearStory targets non-technical, LOB users that need fast answers, which ClearStory enables via its system-driven data blending capabilities that "infer and harmonize" disparate data to generate fast, visual analysis. Companies combining private and external data can see holistic insights about their customers, their market, and their competitors. ClearStory offers interactive and collaborative data story telling with discovery-based visualizations that are enriched by automatically harmonizing external/subscription and internal data sources. For internal data, ClearStory's data Inference capabilities speed data access and preparation from enterprise data warehouses, relational database management systems, Hadoop, cloud applications, and files. ClearStory has partnerships with data providers such as point-of-sale data providers, Kantar Media, D&B, Nielsen, Weather Analytics and DataSift, and is working with IMS Health in the pharmaceuticals industry. Native availability of this content provides users with easy access to these third-party data sources. New data sources can be added via ClearStory's external data API. ClearStory offers data preparation and automated data blending capabilities called Intelligent Data Harmonization (built on Spark for speed and scale) as an integrated part of the platform and a user's analytic workflow. This capability uses data mining techniques to identify data relationships across many different data sources. It also suggests to the user relevant data sources that could be used to either improve the quality of the data and/or enrich the analysis in ClearStory applications/stories. ClearStory's export capabilities can also be used to export raw or harmonized datasets for integration into most data discovery, BI, and data science platforms. .

Lavastorm Analytics

Lavastorm Analytics specializes in operational analytics where ad hoc information exploration and automation of continuous analysis are key requirements. The company provides a tool that enables business users to work, in a graphical interface, on building analytic workflows that connect to multiple data sources, integrate and transform data, apply analytic models, output reports and integrate with external tools such as Tableau, QlikView and Tibco Spotfire for further information visualization. The workflows built are similar to visual ETL scripts, but instead of IT experts working in structured processes to load the corporate data warehouse, it is handled by business users and can be used for ad hoc analysis of disparate data sources — from spreadsheets to data warehouses. The company has deep experience in the telco and financial services industries, supporting large data volumes, performing complex analysis and operating in demanding operational environments. The product is offered in different editions, with desktop and server options — ranging from a free version for an individual user analyzing file-based data to a corporate setup for handling terabytes of information.

Note that Lavastorm has met most of the MQ inclusion criteria but is more narrowly focused on data preparation than other MQ vendors.

Zoomdata

Zoomdata offers innovative capabilities for the exploration of data sources — in particular for real-time and streaming data. It has connectors typically used for big data, such as Hadoop HDFS, Spark, MongoDB, Amazon Redshift and Cloudera Impala; search-based services such as Solr and Cloudera Search; streaming data such as Twitter or Amazon Kinesis; as well as support for traditional data repositories such as Microsoft SQL, Oracle and PostgreSQL. Zoomdata delivers a unique microquery approach to large datasets that improves the sharpness of results with time — just like a picture being downloaded from

the Web is rendered in multiple steps that add additional detail. This allows business users to have an immediate approximation of the results, so they can proceed with their exploration process without delay, while the platform retrieves additional information in the background to sharpen the results. Another interesting feature is what Zoomdata calls "data DVR" — which allows reporting on real-time streaming data with comparisons with historic data, and the ability to rewind or fast-forward the information being rendered. All the information is rendered using a broad range of visually compelling D3-based data visualizations that business users can handle without IT support.

Other BI Platform Vendors

A number of other small vendors may be worthy of consideration, depending on requirements, although they did not meet the criteria for inclusion in this year's Magic Quadrant.

AFS Technologies

AFS Technologies offers Discovery G2, an end-to-end data visualization and data discovery solution that delivers tailored, individual insights and analytics targeted at business users in the field such as sales reps or customer service personnel, or in aggregate for decision makers in the consumer goods industry. The platform can extract information from ERP systems, industry data sources including Nielsen, trade promotion management systems, warehouse management systems and various budgeting tools and spreadsheets, and use this data for a range of management analysis including sales, post-trade spending, warehouse efficiency and general financial. AFS has more than 200 customers that leverage the platform's preconfigured starting templates to deliver customized results reports for sales analyses, post-trade spend analyses, standard warehouse management and financial reports to reduce time to deployment.

Antivia

Antivia is a privately held company that began with an emphasis on collaboration across BI tools and later focused more on the SAP BusinessObjects platform, where its products helped overcome many of the limitations in SAP's dashboard product (Xcelsius, rebranded as Dashboards in SAP BI 4.0). In 2013, the company released DecisionPoint, which is data-source-agnostic, positioning itself as a dashboard and mobile solution beyond the SAP customer base. DecisionPoint has its own client-side microcube engine to provide drill-down and pivot within a dashboard; it also supports multiple universe formats (UNV and UNX) as data sources, along with other relational sources such as Teradata, Oracle, SQL Server, Netezza, big data databases (such as Hadoop), and flat files. In contrast to the SAP dashboard tools, which require scripting, DecisionPoint is an all drag-and-drop dashboard design. It also offers native iPad support.

Dimensional Insight

Dimensional Insight delivers a wide range of BI capabilities through its Diver Solution, spanning data collection, data assembly and information delivery deployed either on-premises, through an appliance or as a cloud based SaaS solution. Diver Solution's data collection tier enables connection to a wide range of source systems and the ability to integrate with the ETL capabilities of the platform. The data assembly tier is the core of Diver Solution, where its multidimensional data model is built and enhanced with business rules in preparation for analysis. Information delivery capabilities offered within the platform include reporting and dashboarding, data discovery and visualization, and MS Office integration with mobile capabilities delivered through DiveTab. Dimensional Insight has leveraged its deep vertical industry and domain expertise to offer several prebuilt "Advisor" solutions built upon the Diver Solution platform. Dimensional Insight's extensive expertise in the healthcare provider vertical is evident in its support for three such purpose-built applications aimed at organizations in the segment: DI Surgery Advisor, DI Physician Performance Advisor and DI Meaningful Use Compliance Advisor. DI Sales Advisor and DI Program Advisor are used to deliver information and key metrics to sales and support teams. DI General Ledger (GL) Advisor allows for analysis and interaction with financial data and the DI Pricing Advisor is used by CPG providers to effectively manage price and maximize revenue, margin and profitability.

Dundas Data Visualization

Privately owned, Dundas Data Visualization started out as a charting-engine technologies company whose OLAP, chart, map and gauge components for ASP.NET, SSRS, SharePoint and Windows Forms were purchased by Microsoft in 2007. Dundas then evolved into a dashboard vendor with its first release of Dundas Dashboard in 2009, which provides interactive visualization functions, a rich set of APIs and a built-in C# scripting engine for data presentation customization and extensibility. To expand its market opportunity, in October/November 2014, Dundas introduced Dundas BI, an end-to-end BI platform focused on self-service. It is Web-based and includes a data warehouse and ETL, data discovery, reports, dashboards, and mobile capabilities. Customers report choosing Dundas for its functionality and ease of use for end users, with most using Dundas's dashboard and interactive visualization capabilities. Dundas also offers a design Professional Services offering to assist customers in implementing BI and dashboarding best practices.

eQ Technologic

eQ Technologic (eQ) delivers BI capabilities through eQube Business Intelligence (eQube-BI), a component of its eQube enterprise software information infrastructure platform. Primarily, eQube-BI provides enterprise "visibility" leading to actionable insight in the product life cycle management (PLM) domain extending across the enterprise to ERP/supply-chain, Management Execution Systems (MESs), Asset Lifecycle Management (ALM), planning systems, warranty systems, often combining streaming sensor data with product requirements, product engineering data, warranty systems, and manufacturing data. EQ's customers are predominantly in the aerospace and defense, automotive and machinery, shipbuilding, high-tech and consumer goods industries — often combining streaming sensor data with product, warranty, systems and data. The platform offers over 100 BI templates and cubes "out of the box" that are specific to industrial companies. It is sold both directly to customers and via partnerships, such as those with Siemens PLM Software, which markets and resells eQube-BI as Teamcenter Reporting and Analytics. EQube-BI is used primarily for rapid prototyping and iterative development of in-memory cubes that can be developed without the need for a data warehouse or datamart. Customers have the

option of using the eQube-BI cubes developed during the prototyping process to build a data warehouse, if needed, for other applications. The company introduced its eQube 3D Insight module to allow customer to visualize the 3D model of their product, with color coding (red/yellow/green) based on different parameters such as number of changes, velocity of change, inventory levels, supply chain bottlenecks and warranty claims. Reference customers identified data access and integration, integration with enterprise applications, and integration with information infrastructure as their main reasons for choosing eQube-BI. Data integration and the ability to create a single view of data — combining several disparate data sources in-memory and honoring the security of the underlying applications — is a clear strength of eQube-BI, but responses to our survey indicated that the product is difficult to use for developers, administrators and end-users alike, with these identified as factors limiting wider deployment. Revamping the user interface, expanding advanced analytics and creating a big data solution for the IoT are on the company's road map.

iDashboards

iDashboards delivers capabilities used to build and consume highly interactive dashboards that can be deployed either on-premises or in the cloud. The platform offers an easy-to-use, code-free interface for accessing cloud and enterprise data, and displaying analytic content and KPIs on intuitive dashboards for end-user consumption. The iDashboards content can be consumed via mobile devices using any HTML5-compliant browser with mobile application options for Android tablet and iPad/iPhone users. Special display solution licensing is available for rendering of dashboards on screens in common areas such as offices, production facilities or boardrooms for shared KPI consumption and monitoring. The iDashboards product line also offers various predefined packaged solutions for popular cloud-based sources, such as Salesforce, Google Analytics, Facebook and Twitter, with prebuilt connectors, transformation logic and a suite of prebuilt dashboards displaying common metrics typically tracked and analyzed for each source. In addition to end-user organizations that use iDashboards to create and deliver dashboards to internal and external users, a growing number of independent software vendors have formed OEM partnerships with iDashboards to embed content in analytic solutions.

InetSoft

InetSoft is a U.S.-based company that specializes in easy-to-use interactive dashboards targeted at expanding end-user adoption plus pixel-perfect report generation, scheduling, and bursting. Business user data mashup is also a core feature of the platform. InetSoft has a large number of OEM customers and also serves enterprises in different geographies with support centers in the U.S. and China (the product is localized to Mandarin in addition to English). In 2014, InetSoft announced native mobile applications for Android and iOS and improved its support for big data sources. Through its product enhancements, InetSoft is trying to address a wide range of capabilities — from traditional reporting to OLAP-based analysis, to ad hoc information exploration and analytic dashboards.

Infor

Infor Business Intelligence (BI) is the basis of an end-to-end platform that encompasses BI, analytics and performance management capabilities. Infor has a global presence and major support centers in EMEA, the U.S. and Asia/Pacific. Infor BI includes an in-memory multidimensional OLAP database; Web front ends, such as Infor BI Dashboards/Motion Dashboards for data presentation and analysis; a feature-rich Microsoft Excel-based interface; a data integration tool; and a modeling tool. Infor BI offers out-of-the-box integration and packaged industry- and domain-specific analytic solutions for Infor ERP applications. In addition, it is frequently deployed in the SAP ERP installed base, primarily as a result of the former MIS Alea's relationship with SAP. Infor continues to enhance the Infor BI platform. In 2014, Infor introduced a metalayer, embedded in the platform, now combining multidimensional and relational ad hoc analysis and reporting capabilities. It continues to invest in improving the mobile app and the in-memory processing performance.

Jinfonet Software

Jinfonet Software delivers JReport — a Java-based BI platform originally developed for embedding in third-party applications by OEMs. Over time, the product has evolved into a general-purpose platform intended for use by end-user companies. However, according to the company, 86% of customers still use the product for embedded BI and 62% of customers are OEMs. It is also optimized to be scalable and fault-tolerant. The current version (JReport 13) features improvements to geospatial, performance and visualizations. JReport 12 enhanced dashboards, interactive visualization and mobile capabilities, and support for big data sources — MongoDB, Hadoop (through Hive), and Amazon Redshift. Jinfonet's product strengths are its embedding capability, through its customizable architecture for integration with host applications, and a high-performance reporting engine (JReport). Enhancements to usability and investment in the cloud are on the company's near-term road map.

Looker

Looker offers tools for business-user-driven data transformation and exploration. Its purpose is not to compete with traditional BI tools, but to facilitate analytic processes between data analysts and end users. Looker is invested in making their customers successful with using the product. It provides experienced data analysts that help their customers with unlimited support in the use of the tool. The platform's key differentiator is LookML — Looker's data modeling language — which lets tech-savvy business users generate in-database queries, with optimized performance, without depending on IT. Repositories such as Teradata Aster, Microsoft SQL Server, Oracle, Amazon Redshift, SAP Hana, Google BigQuery, Apache Spark and Hadoop (through Cloudera Impala), can thus be queried, through LookML, to generate insights. A number of customizable visualizations can also be applied to the information extracted from the data sources and be used to create reports. The sales focus of the company has been driven by an internal team and partner sales team and has been centered in the U.S. Looker recently opened its operations in Europe with an office in London and has customers across Europe, Asia and Latin America. Looker has plans to continue to expand its reach through its partner network, with companies such as Amazon, IBM, Cloudera, Snowplow Analytics and Teradata.

Manthan

Manthan offers a comprehensive BI and advanced analytics cloud-based platform focused on retail. The Manthan Analytics Platform, which offers from data integration through to reporting, dashboards, interactive visualizations and predictive and prescriptive analytics (optimization engines and decision frameworks), is the foundation for its packaged retail analytics applications for merchandise, customers and supplier/wholesaler analytics. Making insights from advanced analytics accessible to business users in retail is a differentiator for Manthan. According to its customer references, customers choose Manthan because of its functionality and ease of use and for its specialized vertical expertise.

Manthan met all of the inclusion criteria for a dot position in the MQ, but was excluded from the top 24 because of its focus on packaged applications versus a platform, which is the main focus on this MQ. However, Retail customers looking for unified set of packaged applications supporting range of descriptive, diagnostic, predictive and prescriptive analytics should consider Manthan.

Phocas

Phocas currently offers a subscription-based BI product and is migrating to a SaaS model with a cloud-first approach to development. Multitenancy, the ability to blend data from cloud and on-premises data sources, and a full Web user experience make it particularly suited to a cloud BI environment, although many of its customers still prefer to use their traditional on-premises offering. Phocas offers a range of capabilities, including dashboards, basic data discovery and collaboration features, geospatial rendering of information, advanced analytics models (such as shopping basket analysis and profit optimization) and mobile BI — with desktop-like data exploration capabilities through an HTML5 interface. The company is investing in simplifying its customer experience, which is paying off in terms of customers rating Phocas highly for ease of use and achievement of business benefits. Phocas is also concentrated in the delivery of vertical solutions for different industries and roles, providing an extensive list of data connectors to business applications that help simplify deployments. The product is localized in several languages and currently used by over 1,000 customers.

SpagoBI Competency Center

SpagoBI is a totally open-source BI solution offered as a single version that should ease deployment and support in comparison with similar solutions. Its core markets go beyond Western Europe (where it originated in an IT consultancy firm) to include regions where OEM solutions and open-source are popular — such as the U.S., Latin America, and Central and Eastern Europe. The company is headquartered in Italy, but has offices in the U.S., Brazil, Argentina, the Republic of Serbia and Belgium, as well as a network of more than 100 partners. The product is now on version 5.1 (released in January 2015) and has expanded data connectivity toward big data and analytic capabilities, with new solutions for OLAP analysis, self-service in-memory cockpits, data mining with R, social listening and what-if analysis. SpagoBI's reference customers report a breadth of use that is slightly above average, but claim that the product's ease of use, and the complexity of analysis that can be achieved with it, are below the average (for this Magic Quadrant survey). There is also feedback from customers that the product is difficult to implement, but this is in-line with what the open-source market has offered over the years. It is still too early to understand to what extent the new version, 5.1 will impact these assessments.

Strategy Companion

Strategy Companion's Analyzer platform is a self-service BI solution ideally suited for Microsoft SQL Server Analysis Services (SSAS)-based solution development, with several deployment options available: Analyzer Enterprise for internal BI delivery through on-premises deployment; Analyzer SaaS, which is a multitenant option used by cloud and SaaS application providers to build and host external solutions; and Analyzer OEM, which is used by customers to embed content in applications using open standards offered by the Analyzer platform. Analyzer Mobile is based on HTML5 and can render content on most mobile devices including iPads, iPhones, BlackBerry, Android and Windows phones using role-based security profiles defined within Analyzer. Strategy Companion leverages a unique data analysis feature in Analyzer called "Recombinant BI," which is named from the combination of Recombinant DNA and Genetic Recombination. This patent-pending functionality extends the capabilities beyond traditional OLAP, by allowing users to combine new data as needed and answer new questions on their own without a reliance on IT to curate the data needed for analysis. Customers report using Analyzer for relatively complex analytic tasks to achieve business benefits that exceed the overall survey average.

Zucchetti

Zucchetti first launched a BI platform offering (Infinity) in 2007, to complement its broad array of business applications (for HR, CRM, and document management). Zucchetti now delivers BI capabilities through its InfoBusiness platform to approximately 6,000 customers, many of which also use its ERP and HR solutions. In fact, 80% of customers using Zucchetti for BI are integrating it with either Zucchetti ERP or Zucchetti HR; 20% are using it as a stand-alone BI platform. Based on Gartner's other research, it is evident that the InfoBusiness platform is targeted at descriptive use cases, offering reporting and parameterized dashboards, and some ad hoc analysis capabilities to consumers. Zucchetti plans a product launch of Infinity Analytics during 2H15. The platform also integrates collaboration capabilities, enabling users to share BI content. Other recent improvements to the platform include the ability to model multiple data views and the support of 64-bit platforms. Zucchetti is using a business model of 55% indirect, 45% direct to grow its BI business beyond its current business application focus.

Inclusion and Exclusion Criteria

The number of vendors on this year's Magic Quadrant is limited to 24. We ranked vendors that met all the inclusion criteria based on a combination of the criteria listed below.

Generated at least $20 million in total BI-related software license revenue annually,[1] or at least $17 million in total BI-related software license revenue annually, *plus* 15% year-over-year in new license growth.

In the case of vendors that also supply transactional applications, show that its BI platform is used

routinely by organizations that do not use its transactional applications.

How well vendors address the 13 product-specific critical capabilities defined in the Market Definition section (OEM components from other vendors were counted). This is demonstrated by filling out the Gartner supplied RFP and Vendor Questionnaire and through the vendor briefing. Gartner analysts determine, based on the documentation provided, how well a vendor meets this inclusion criteria.

Had a minimum of 35 customer survey responses from companies that use the vendor's BI platform in productions.

The vendor must have participated in all data collection activities, including:

1. Providing a product list and mapping to critical capabilities

2. Providing verification of revenue

3. Providing customer survey references

4. Completing the critical capabilities RFP

5. Providing up to a one-hour video demo highlighting how the BI platform supports as many of the 13 product capabilities as possible

6. Completing the vendor questionnaire

7. Conducting a Magic Quadrant briefing with the authors

Vendors that offer specific industry or domain analytic applications only are excluded from consideration because this Magic Quadrant highlights BI and analytics platforms that are used to build analytic applications for any industry or domain.

Evaluation Criteria

Ability to Execute

Vendors are judged on their ability and success in making their vision a market reality that customers believe is differentiated and that they purchase. Delivering a positive customer experience, including sales experience, support, product quality, user enablement, availability of skills, upgrade/migration difficulty, also determines a vendor's Ability to Execute. In addition to the opinions of Gartner's analysts, the ratings and commentary in this report are based on a number of sources: customers' perceptions of each vendor's strengths and challenges, as gleaned from their BI-related inquiries to Gartner; an online survey of vendors' customers conducted during October 2014 (which yielded 2,083 responses); a questionnaire completed by the vendors; vendors' briefings, including product demonstrations, strategy and operations; an extensive RFP questionnaire inquiring how each vendor delivers specific features that make up the 13 critical capabilities (a toolkit with the RFP template will be published soon after this Magic Quadrant); a prepared video demonstration of how well vendor BI platforms address the 13 critical capabilities; and biscorecard.com research.

Ability to Execute Criteria

Product/Service*: How competitive and successful are the goods and services (the 13 capabilities) offered by the vendor in this market, and how extensively are they used?

Overall Viability: What is the likelihood of the vendor continuing to invest in products and services for its customers? Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood of the individual business unit continuing to invest in the product, offer the product and advance the state of the art within its product portfolio.

Sales Execution/Pricing*: Does the vendor provide cost-effective licensing and maintenance options? This covers the vendor's capabilities in all presales activities and the structure that supports them. It also includes deal management, pricing, negotiation and contracting, presales support and the overall effectiveness of the sales channel.

Market Responsiveness and Track Record: Can the vendor respond to changes in market direction as customer requirements evolve? This covers the ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customers' needs evolve and market dynamics change. New license growth and existing market share also factor into this ranking.

Customer Experience*: How well does the vendor support its customers? How trouble-free is the software?

* These criteria are scored partly or wholly on the basis of input from the Magic Quadrant customer survey.

Table 1. Ability to Execute Evaluation Criteria

Evaluation Criteria	Weighting
Product or Service	High
Overall Viability	High
Sales Execution/Pricing	High
Market Responsiveness/Record	High
Marketing Execution	Not Rated

Customer Experience	High
Operations	Not Rated

Source: Gartner (February 2015)

Completeness of Vision

Vendors are rated on their understanding of how market forces can be exploited to create value for customers and opportunity for themselves. The Completeness of Vision ratings and commentary in this report are based on the same sources described in the Ability to Execute section.

When determining Completeness of Vision for the Offering (Product) Strategy criterion, Gartner evaluated vendors' ability to support key trends that will drive business value in 2015 and beyond:

Expanding analysis to more users:

Demand for easy-to-use tools has already fueled tremendous growth in data discovery. Beyond data discovery, we expect natural-language-processing query and analysis (text and voice) as well as natural-language query generation to help users interpret results to become more a mainstream requirement to broaden use, while automated semantic discovery and self-service data integration and data enrichment will reduce the time users spend on data preparation and improve data quality and governance. Moreover, usage of more business-user-accessible advanced analytics and analytic visualizations (or smart data discovery) — in addition to business user accessible forecasting, simulation and optimization that automatically discover and highlight patterns and findings in data for citizen data scientists — will expand.

Embedding BI content and encapsulating advanced analytics (such as recommended courses of action) in applications or within a business process at the point of user decision making will also help to expand the benefits of analytic-driven insights to nontraditional BI users.

Mobile BI investment continues, with most vendors able to repurpose online content for mobile devices; however, credit in terms of vision was given for advanced mobile capabilities (such as GPS, write-back, camera integration and content authoring).

Better decision making remains a key reason why organizations invest in BI platforms. The integration of collaboration, social and crowdsourced recommendations capabilities in BI platforms in support of collaborative and guided decision making will optimize decisions and performance outcomes.

New types of data source and analysis:

The fastest-growing kind of data is that delivered via real-time event streams, emitted by sensors, machines, people and transactional business systems. It has significant potential for business value and transformation across most industries in terms of the ability of analytic applications to use this data.

The ability to find patterns, correlations and insights across new sources of multistructured data using new types of analysis, such as graph or link analysis and various forms of content analytics, will become a mainstream requirement as companies try to innovate and find operational efficiencies across business processes that use data. Capabilities that enable the collection, storage, management, correlation, organization, exploration and analysis of multistructured data will be increasingly important.

New business models and sources of revenue:

Product vision credit is given for capabilities that enable companies to find new ways to productize the data assets they have or can assemble to improve customer relationships, create new business models and generate new sources of revenue and customer-facing applications.

Existing and planned products and functions that contribute to the above trends were factored into each vendor's score for Offering (Product) Strategy in Completeness of Vision.

Completeness of Vision Criteria

Market Understanding*: Does the vendor have the ability to understand buyers' needs, and to translate those needs into products and services? Ease of use, breath of product use and the types of analysis users conduct with the platform — all key buying criteria — factor into this rating.

Marketing Strategy: Does the vendor have a clear set of messages that communicate its value and differentiation in the market? Is the vendor generating differentiated awareness? Is the vendor's awareness going up or down?

Sales Strategy: Does the vendor have the right combination of direct and indirect resources to extend its market reach, including an innovative partner strategy, differentiating and attractive licensing/buying models, or sales models? Are the packaging and pricing model contributing to an extension of market reach?

Offering (Product) Strategy: Does the vendor's approach to product development and delivery emphasize differentiation and functionality that map to current and future requirements (based on 16 product vision criteria)? These criteria are summarized by the key trends described at the beginning of the Completeness of Vision section.

Vertical/Industry Strategy: How well can the vendor meet the needs of various industries, such as financial services, life sciences, manufacturing and retail?

Innovation: Is the vendor focusing its resources, expertise or capital to address key market requirements for competitive advantage? Is the vendor investing in and delivering truly unique and in-demand capabilities? Is the vendor setting standards for innovation that others try to match?

Geographic Strategy: How well can the vendor meet the needs of locations outside its native country, directly or through partners?

* These criteria are scored partly or wholly on the basis of input from the Magic Quadrant customer survey.

Table 2. Completeness of Vision
Evaluation Criteria

Evaluation Criteria	Weighting
Market Understanding	High
Marketing Strategy	High
Sales Strategy	Medium
Offering (Product) Strategy	High
Business Model	Not Rated
Vertical/Industry Strategy	Medium
Innovation	High
Geographic Strategy	Medium

Source: Gartner (February 2015)

Quadrant Descriptions

Leaders

Leaders are vendors that are strong in the breadth and depth of their BI platform capabilities, and can deliver on enterprisewide implementations that support a broad BI strategy that delivers business value. Leaders articulate a business proposition that resonates with buyers, supported by viability and operational capability to deliver on a global basis. Smaller vendors, which may lack strong scores for geographic or vertical/industry strategy, may still be Leaders due to the strength of their market understanding, capabilities and road maps (to enable business users more easily to find relevant insights in data), market momentum, and excellent execution on key product, customer and sales experience measures.

Important to Leader positioning:

Delivering an excellent customer experience (product quality, support, migration, ease of use, user enablement, sales experience, achievement of business benefits)

Product and product vision

Innovation

Market growth and momentum

Marketing and sales differentiation and effectiveness

Having capabilities that are used broadly

Less important to Leader positioning:

Globalization

Vertical strategy

Ecosystem

Installed base

Having a broad range of capabilities used in limited ways

Summary of Leaders Quadrant Positions

Vendors are positioned on the edges on the Leader's quadrant with significant white space in the middle, because no single vendor is executing on both current business user requirements to support larger and larger business-user-oriented yet governed deployments *and* innovating in preparation for the next generational shift in user experience. There are concerns that vendors that own the installed base market share will not be able to regain market momentum despite their investments in innovation.

Tableau and Qlik have market momentum because they are excelling at delivering on current market and customer experience requirements. They are satisfying customers for data discovery, are enabling easy, broader use, and are growing.

Customers place high value on ease of use, satisfaction with product features, sales experience, support, product quality, upgrade experience, user enablement, achievement of business benefits and supporting a range of analysis for all users. These vendors with the majority of the market momentum are focused on making it easier and simpler for more users to author content and explore and discover patterns in data wherever they are. They are executing on all or most requirements customers care most about and are growing from new analytics project investments, although enterprise features for governance, administration, embeddability and scalability are a work in progress (Qlik has introduced these in its new Qlik Sense platform, while Tableau is adding these incrementally with each new release to address this limitation).

From a vision standpoint, both Tableau and Qlik are largely evolving their capabilities by continuing to invest in making their platforms easier to use for a broader range of users, but have placed less emphasis on emerging growth areas like smart data discovery to further democratize access to analytics (see the Market Overview section for more detail on these emerging capabilities and trends) or on self-service data preparation (Tableau is planning limited capabilities as part of Tableau 9; Qlik is also planning to introduce some capabilities in a future release).

SAP, SAS and IBM are meeting most Completeness of Vision requirements and own a large portion of the installed base market share. They are investing aggressively to close gaps and regain momentum and differentiation through a next-generation, smart data discovery experience featuring self-service data preparation and automated pattern detection with natural-language query and generation for smart data discovery. They are also positioning their integration with their enterprise platforms to support governed data discovery as key differentiators. These vendors must translate their vision into renewed market momentum, including outside their installed bases, and improve their customer experience and delivery of business value to remain in the Leaders' quadrant in the future.

> SAS has had better traction, adoption and customer experience than IBM and SAP as a result of its major commitment to SAS Visual Analytics, its data discovery capabilities, as its go-forward BI platform. SAS has leveraged its advanced analytics strengths into compelling differentiators around smart data discovery in Visual Analytics.

> SAP has invested aggressively in Lumira with forward-looking capabilities around smart data discovery leveraging its KXEN acquisition and self-service data preparation. It also has a clearer road map than IBM on how Lumira integrates with the rest of its BI stack (Hana, SAP BusinessObjects).

> IBM has a compelling vision for Watson Analytics — combining self-service data preparation, natural-language query generation and exploration, automatic pattern detection and prediction, and visual storytelling — that will likely drive future market requirements. However, its road map for how this capability will integrate with and breathe momentum back into IBM Cognos is less clear.

Microsoft, MicroStrategy, Oracle and Information Builders have many elements of Completeness of Vision, but are hampered by execution challenges.

> Microsoft has delivered data discovery capabilities in Excel that have had some level of adoption, particularly in its own installed base. It has a strong product vision (particularly with natural-language query and self-service data preparation), and offers a better customer experience than the other megavendors. However, mediocre product scores and the lack of a strong BI and analytics marketing and sales focus — combined with the complexity of on-premises deployments and the relatively limited functionality currently delivered through the Office 365 cloud — has limited Microsoft's market traction and position to date. Its new updated Power BI product offering (currently in preview), which can be deployed as a stand-alone solution for business users to author and share analytic content without the need for Excel 2013 or an Office 365 subscription, may change this trajectory in the future.

> Oracle has gained momentum in the cloud through embedded SaaS analytics in its Fusion applications and has introduced a BI Cloud Service. Oracle also is credited with product vision around multistructured and big data analytics. However, it has been late to invest in business-user-oriented capabilities. While Oracle continues to grow BI revenue into its installed base, these customers have rated it near the bottom across customer experience measures.

> MicroStrategy offers a compelling product and vision for governed data discovery and has made a number of positive business changes, particularly around pricing, but recent disruptions from executive turnover and layoffs may have negatively impacted its customer experience and sales momentum. It has also impeded marketing efforts to competitively reposition the platform for mainstream business-user buying requirements where product investments have resulted in differentiation.

> Information Builders is a longtime player with a strong enterprise platform for delivering information-centric applications targeted at a large number of business user consumers, both internal and customer-facing. While it has invested in governed data discovery, it is late to the market. Information Builders has visionary elements on the road map and has introduced early innovations to the market, but has achieved limited adoption outside of its core information-centric applications sweet spot. Like the most other IT-centric Leaders, growth and momentum has been limited and largely from expanding within its installed base.

Challengers

Challengers are well-positioned to succeed in the market. However, they may be limited to specific use cases, technical environments or application domains. Their vision may be hampered by a lack of coordinated strategy across the various products in their platform portfolios, or they may lack the marketing efforts, sales channel, geographic presence, industry-specific content and awareness of the vendors in the Leaders quadrant.

Summary of Challenger Positions

The large number of vendors in the Challenger, Visionary, and Niche quadrants with specialized strengths suggests opportunities for customers to find a match for their requirements beyond the largest vendors. Most of these vendors offer differentiated capabilities for addressing business user driven and emerging requirements.

> Birst is in the Challengers quadrant because it has been successful at delivering on most customer requirements for centralized BI deployments in the cloud, but it lacks the market presence, go-to-market machine, and some vision elements of a Leader. Birst was pioneer in the market for cloud BI and is, therefore, well-positioned to take advantage of the market as cloud BI adoption expands.

> Logi Analytics offers an easy-to-use IT-centric platform that is well-suited to embedded use cases;

customers are satisfied with all aspects of their experience. With evolving capabilities Logi Analytics has gained vision and innovation credit for its introduction of a unique social and crowdsourced interface for data discovery.

Visionaries

Visionaries have a strong and unique vision for delivering a BI platform. They offer depth of functionality in the areas they address. However, they may have gaps relating to broader functionality requirements. Visionaries are thought-leaders and innovators, but they may be lacking in scale, or there may be concerns about their ability to grow and provide consistent execution.

Summary of Visionary Positions

The large number of vendors in the Challengers, Visionaries, and Niche Players quadrants with specialized strengths suggests opportunities for customers to find a match for their requirements beyond the largest vendors. Most of these vendors offer differentiated capabilities for addressing business-user-driven and emerging requirements.

Tibco Software moved to the Visionaries quadrant this year. Tibco has a strong product and good product vision that spans business-user-driven data discovery, geospatial, advanced analytics (Spotfire), IT-centric reporting and embedded BI (Jaspersoft). The company has also introduced differentiated pricing models in the cloud for AWS. However, the acquisition of Tibco by Vista Partners, combined with poor sales execution, introduced uncertainty among customers and prospects regarding the future of Spotfire and Jaspersoft. Existing customers also appeared to be affected by the transition and rated Tibco below average across most customer experience measures, which is a significant change from last year.

Alteryx and Panorama Software earn places in the Visionaries quadrant because each delivers a unique set of capabilities targeted at key buying requirements.

Alteryx offers strong self-service data preparation, geospatial intelligence and embedded advanced analytics.

Panorama delivers a unique user experience for social and smart BI and data discovery.

Niche Players

Niche Players do well in a specific segment of the BI platform and analytics market, such as reporting, dashboarding, collaboration, embeddability or big data integration, or have a limited capability to innovate or outperform other vendors. They may focus on a specific domain or aspect of BI, but are likely to lack depth of functionality elsewhere. They may also have gaps relating to broader platform functionality or have less-than-stellar customer feedback. Alternatively, Niche Players may have a reasonably broad BI platform, but limited implementation and support capabilities; or relatively limited customer bases, such as in a specific geography or industry. In addition, they may not yet have achieved the necessary scale to solidify their market positions.

Summary of Niche Positions

The large number of vendors in the Challenger, Visionaries, and Niche Players quadrants with specialized strengths suggests opportunities for customers to find a match for their requirements beyond the largest vendors. Most of these vendors offer differentiated capabilities for addressing business-user-driven and emerging requirements.

Board International offers integrated BI and planning with a main focus in Europe, but is expanding in the Americas and the Asia/Pacific region.

Datawatch is a new entrant to the Magic Quadrant that offers data discovery capabilities for a range of structured, streaming and multistructured data — which are emerging requirements. This makes it particularly well-suited to analytic applications for the emerging requirements or the IoT.

GoodData is the other cloud BI vendor, in addition to Birst, that was early to the cloud BI market and has gained market traction. It is differentiated by its integrated end-to-end portfolio (from data repository to dashboards), frequent deployment for embedded and digital marketing use cases as well as integration of social media data sources.

OpenText (Actuate) offers large-scale systems-of-record reporting and has recently refocused on supporting embedded BI — selling to application developers as well as BI teams. It has had a difficult year in terms of execution across all customer and performance measures. While its acquisition by OpenText creates some uncertainty, OpenText has announced it will continue to run Actuate as a dedicated analytics group. In addition, it will leverage Actuate for common analytics across all OpenText solutions. The acquisition has the potential to provide Actuate with a new direction, stability, and access to sales and channel resources necessary for improvement.

Pentaho is to the right in the Niche Players quadrant because of its product vision and innovation around big data and self-service data preparation. On 10 February 2015, Hitachi Data Systems announced its intention to acquire Pentaho. Hitachi Data Systems plans to continue to operate Pentaho as a separate business unit and to embed Pentaho into its portfolio of big data and analytics products and services, with a particular emphasis on solutions for the IoT. The acquisition is expected to close by June 2015.

Prognoz is a regionally dominant platform in Eastern Europe, addressing a full range of BI and analytics requirements. It has been investing to expand beyond its traditional regional strong hold.

Pyramid Analytics offers a governed, yet easy-to-use, Microsoft-centric platform focused on traditional styles of interactive analysis. It is also expanding beyond its Microsoft-centric approach.

Salient Management Company offers in-memory interactive exploration and analysis capabilities that customers find easy to use. Salient has a strong focus in healthcare and CPG.

Targit is an intuitive and integrated data discovery and systems-of-record reporting, Microsoft-centric platform with a strong presence in Europe and growing momentum in the U.S.

Yellowfin offers a business-user-friendly system-of-record BI platform with differentiation around storytelling, mobile and collaboration and a strong presence in Asia/Pacific.

Context

Readers should not use this Magic Quadrant in isolation as a tool for vendor selection. Gartner has defined the BI and analytics market broadly. We include a variety of products that span a range of buyers and use cases. Consider this Magic Quadrant to be more of a summary of Gartner's research on this market. When making specific tool selection decisions, use it in combination with our Critical Capabilities, Survey Analysis research, and Strengths, Weaknesses, Opportunities and Threats (SWOT) publications, as well as our analyst inquiry service. Moreover, readers should be careful not to ascribe their own definitions of Completeness of Vision or Ability to Execute to this Magic Quadrant, which often map narrowly to product vision and market share, respectively. The Magic Quadrant methodology factors in a range of criteria in determining position, as defined in the Evaluation Criteria section.

Market Overview

Gartner's view is that the market for BI and analytics platforms will remain one of the fastest-growing software markets. The market (for BI platforms) grew 9% in 2013, and is projected to grow at a compound annual growth rate of 8.7% through 2018 (seeForecast: Enterprise Software Markets, Worldwide, 2011-2018, 4Q14 Update"), driven by the following market activity:

Expansion of data discovery dominates new investment. Continued investments in data discovery and large governed data discovery deployments are expected to continue. Since a greater percentage of purchasing and usage within organizations will be driven primarily by business-user-oriented data discovery requirements (in order to compete and remain relevant to customers), the majority of current IT-centric vendors will continue to shift the focus of their new product investment and platform emphasis from IT-authored production reporting to governed, business-user-driven data discovery and analysis tools — or risk being marginalized by data discovery vendors that are investing to become more enterprise-capable. As a result, data discovery will continue to displace IT-authored static reporting as the dominant BI and analytics user interaction paradigm for new implementations in 2015 and beyond. IT-authored, systems-of-record reporting will not disappear, but it will continue to account for a smaller percentage of overall analytics use. At the same time, a larger percentage of data discovery deployments will expand overall user adoption as a key driver of market growth.

Self-service data preparation and enrichment addresses a high-value data discovery challenge. The shift toward business-user-driven data discovery has highlighted the need to address the significant challenges of data preparation to enable broader and more governed use. Self-service data preparation capabilities are emerging that extend beyond the current capabilities of most data discovery tools, which offer basic data mashup to help users prepare their data for analysis and can be very time-consuming. Self-service data preparation platforms enable business users to reduce the time and complexity of preparing data for analysis in a governed and reusable way. They feature capabilities like visual data flow building and automation, semantic autodiscovery, intelligent joins, intelligent profiling, hierarchy generation, data lineage and data blending on varied data sources, including multistructured data and enrichment. Many of these platforms also feature automated machine-learning algorithms in the background that visually highlight the structure, distribution, anomalies and repetitive patterns in data, with guided business-user-oriented tools to suggest how to resolve issues and enhance data. The intent of these tools is to make the data integration process accessible to business analysts, in addition to traditional IT users, to address the ongoing and high-value problem of data preparation.

Smart data discovery will extend data discovery to a wider range of users and enhance insights and interpretation. These emerging capabilities facilitate discovery of hidden patterns in large, complex and, increasingly, multistructured datasets, without building models or writing algorithms or queries. It goes beyond data discovery, because business users and business analysts can benefit from advanced analytics (to highlight and visualize important findings, correlations, clusters, predictions, outliers, anomalies, linkages or trends in data that are relevant to the user), with user interaction and exploration via interactive visualizations, search and natural-language query technologies. Some tools also interpret results for the user with natural-language generation of text to highlight patterns and explain insights. This will also reduce the time to insight, as well as the time and expertise needed for the manual data exploration and modeling. Smart data discovery does not replace advanced analytics or the data scientist; it complements them, by adding a class of citizen data scientists that can develop hypotheses that can be explored in more detail and validated by the data scientist.

Cloud BI will continue to grow in LOBs and beyond as data gravity (where the majority of data resides) shifts to the cloud. Adoption intentions have been constant with those of last year. About 41% of respondents to Gartner's BI and analytics platform Magic Quadrant survey (compared with 45% last year) said they either are putting, or plan to put, their BI in either a private, public or hybrid cloud during the next 12 months. BI vendors with cloud offerings are moving toward meeting critical market requirements for governed business-user-friendly platforms and to deliver strong product functionality, positive customer experiences and high business value to customers. Increasingly, traditional on-premises vendors are also prepared to support cloud BI. Moreover, Salesforce entered the BI and analytics platform market in October 2014. Its market entry could increase cloud BI adoption, particularly for customer-centric use cases where Salesforce data is critical.

Streaming data. The past 10 years of analytics investment and value were driven primarily by customer-oriented companies or the "Internet of People." The next 10 years will be driven by investments in applications that use the IoT. The fastest-growing kind of data is real-time event streams, sensors and machine data, and events generated by devices. These new applications, combined with insights from other new (multistructured) data types (together with new types of analysis) will generate the next major wave of analytics investment and business transformation.

This will enable companies that have historically competed on physical assets to compete on information assets.

Multistructured data analytics. Expanded investment in new types of analysis on a variety of structured and unstructured data will deliver new insights that drive business value and transformation.

Embedded BI. Organizations will invest in embedding traditional BI content (reports and dashboards), interactive analysis, predictive and prescriptive analytics in applications and business processes — that deliver optimized recommendations and courses of action to nontraditional BI users at the point of decision or action (increasingly mobile) — to further extend the pervasiveness and benefits of BI and analytics.

Customer-facing analytics and data monetization. Companies will increasingly invest in capabilities that transform analytics from a cost center to a profit center as they find new ways to productize the data assets they have, or can assemble, to improve customer relationships, create new business models and generate new sources of revenue.

Collaboration and social capabilities. Together with the crowd sourcing and sharing of BI content and analysis, these will also drive a more pervasive use and higher business value from BI investments.

Insurance Context

🕐 **24 March 2015**

Analyst(s): Kimberly Harris-Ferrante

As P&C and life insurers focus on information innovation and improved business outcomes, the need for BI and analytics is growing among insurers of all types and sizes. The vendor market is evolving to meet this need and causing buyer confusion, as the variations in types of solutions are unclear.

Market Differentiators

The insurance industry is built upon data that is used for risk assessment, pricing, customer selection and regulatory reporting, for example. Companies have teams of actuaries, who have sole responsibility for pricing, and teams of data experts in groups such as finance and marketing, who have supported specific business processes. Much of the past data focus, however, has been on reporting and siloed analysis for limited business results. Investments in business intelligence (BI) have flourished among Tier 1 insurers (over $5 million in net annual premiums), resulting in redundant BI solutions and limited business value, due to the siloed nature of how the solutions were implemented. Some insurers have dedicated IT teams to manage the BI solutions, and others have deployed BI competency centers that manage solution use. Small to midsize insurers, in contrast, have often been unable to acquire BI solutions — due to the lack of business case or budgetary restrictions — and are, therefore, running their organizations with spreadsheets or basic data analysis tools.

Major trends include:

New demands for advanced analytics — During the past two to three years, interest in advanced use of BI and analytics solutions has risen among many business and IT leaders, especially in mature markets. Trends such as digitalization and customer experience management have resulted in an increased focus on topics such as information innovation. Additionally, organizational stressors have resulted in intensified focus on loss reduction and customer retention — both of which require more advanced analytical capabilities.

Focus on advanced analytics has expanded throughout the organization as business executives in claims, underwriting, marketing, distribution and fraud investigation have begun to understand the value of data to their business outcomes. Advanced analytics has become more pervasive, moving from point solutions to enterprisewide, with innovative insurers exploring the extension of analytics to value chain partners, such as agents, corporate clients and service partners. To support new business users who are not data experts, companies are increasingly favoring solutions with good interactive visualization capabilities that can run on multiple devices/platforms (including mobile devices).

Focus on predictive/prescriptive capabilities — Business and IT leaders want to have more powerful outcomes from their analytics investments through the use of predictive/prescriptive capabilities. Focus is shifting from assessment of how they are doing today and comparison with past historical performance to forward-looking projections on business processes and outcomes. Insurance business leaders are building models to predict losses postcatastrophe, next-best action in marketing, risk during underwriting, claims losses, or requirements and fraud potential, for example. All require predictive analytics that will show possible outcomes, providing business leaders with much-needed information to reduce losses, avoid risks, proactively service customers, grow revenue and improve customer experiences.

The need for embedded analytics — Today, BI and analytical solutions often run in isolation, requiring that the business user leave the core system to get the information needed. To solve this problem, business and IT leaders are increasingly investigating embedded analytics. This is the process of embedding analytical capabilities within the core business applications (for example, underwriting workstation or claims system) so that business users do not have to leave the core system to get the information to support the specified business process. As the industry increasingly demands embedded analytics, two things have happened: (1) new partnerships have been formed with services to integrate between BI/analytical solutions and core systems; and (2) some core systems vendors are acquiring/building BI/analytical solutions to offer in conjunction with their core transaction systems. In the latter case, solutions built by a single vendor are often built on the same technology and share a common data model to help with ease of implementation for the user. This is the ideal case.

Improved data management requirements — As business leaders look to use data in new and innovative ways, they are hoping to improve the use of traditional data — including both structured, such as log and transactional data, and unstructured dark data, which is not utilized yet — and to bring new data into the enterprise from a range of sources, including new third-party providers, consortia and social data. BI and analytical solution providers must have a comprehensive knowledge of the data ecosystem to be able to support this need. Awareness of the data requirements for specific industry processes — marketing, underwriting, quotation, fraud investigation and claims — will be required for improved implementation and integration. This includes the selection of the data linked to business outcomes, versus data that is not going to be applied in reporting or analytics programs. Prebuilt connections, data model awareness and partnerships will all help vendors meet industry needs in this area. Additional initiatives targeted at data governance, quality and privacy are also needed for corporate success.

Greater need for prebuilt industry content — Tier 1 insurers have generally shown more acceptance of horizontal solutions, which typically lack insurance content (including data models, analytical models or vertical dashboards). They have wanted to build their own unique solutions and not depend on the vendor to supply templates, models or insurance intellectual property. However, as buying grows among small-to-midsize insurers and among business users with specific line-of-business/functional requirements, we have seen a greater demand for industry-specific solutions that come with off-the-shelf content that contains common industry metrics or key performance indicators. This content is used to jump-start model and dashboard development, reducing implementation costs and risks. During sales and demos, business users want something that looks like it was built for them, with industry-specific data models, analytical models, and dashboards that present common industry metrics. This helps them visualize the uses of the tool and provides them with some industry best practices that they may be lacking. The off-the-shelf content serves as a template to ease implementation as companies adjust metrics, data input and analytical models to match their unique business needs. This challenges horizontal BI solutions, which do not focus on industry-specific needs, and has opened the door for a new market of vertical BI/analytical tools built specifically for P&C and life insurance.

Greater acceptance for hosted and cloud-based models — Typically, Tier 1 insurers have wanted on-premises data warehouses and BI solutions. Newer purchasers, however, especially small-to-midsize insurers and line-of-business/departmental buyers, have opted more for off-premises options, where they can use cloud or hosted deployment. This helps control infrastructure costs long term and is proving to be a viable model for the delivery of BI and analytics for many companies. Vendors wanting to compete in this market must offer new delivery models to meet buyer needs and not rely exclusively on on-premises technology deployments, as we have seen in the past.

Considerations for Technology and Service Selection

As with other industries, BI solutions are being overtaken by analytical solutions, which provide more value to end users and have greater capabilities for real-time, predictive and decision support for critical industry processes. In the insurance market, specifically, there is a newly formed market made up of specialized industry-specific BI solutions (mostly for P&C insurance). These market changes will result in greater demands among technology buyers and more critical assessment of the functionality supported by BI and analytical solutions.

Recommendations for insurance business and IT leaders:

Document the business case for each solution, including outcome to be impacted and amount of industry content that the business needs the vendor to deliver. Ensure that there is a clear definition of the role of the business people (including possible data scientists, analytics professionals and business owners) who will create and build out the models and dashboards. For companies that lack data mastery, or where business is unclear on best practices, using tools with prebuilt industry content may help decrease implementation costs and risks.

Carefully assess the three classifications of vendors — horizontal vendors, vendors with industry accelerators and vertical/niche vendors — to determine the best solution type to match your company's vision, business need, implementation plan and analytical competencies. Determine how much industry expertise is needed in areas such as prebuilt content, business understanding, core system integration and third-party data partnerships.

When assessing vertical/niche vendors, carefully review the breadth and depth of the content delivered by each vendor to ensure that the content is fully developed and will meet implementation needs. Evaluate the documentation for the data and analytical content.

Analyze the data model used in the solutions and the adherence to industry standards, such as the ACORD data model. Determine if the model is compatible with industry data models or those you have adopted from standards bodies, as well as the work required to map the models.

Assess the predictive capabilities of the vendors to ensure that they match long-term business objectives around forecasting and modeling.

Test the usability of the UI to ensure that it is simple and intuitive for easy user training and use. Ensure that the tool will allow users across the company, even those without statistical or data background, to use the tool without heavy training or assistance. Ensure visualization capabilities are robust and intuitive.

Assess the vendor's strategy and execution plans to support big data, especially new types such as social, clickstream and unstructured. Select vendors that have text mining and a roadmap for unstructured data assessment in order to future-proof decisions.

Notable Vendors

Vendors included in this Magic Quadrant Perspective have customers that are successfully using their products and services. Selections are based on analyst opinion and references that validate IT provider claims; however, this is not an exhaustive list or analysis of vendors in this market. Use this perspective

as a resource for evaluations, but explore the market further to gauge the ability of each vendor to address your unique business problems and technical concerns. Consider this research as part of your due diligence and in conjunction with discussions with Gartner analysts and other resources.

Gartner conducted an assessment of the overall BI and analytical solution market between December 2014 and January 2015 to determine which vendors had dedicated focus on insurance, which ones had insurance assets/content and which ones had a sufficient customer base in this industry. Overall, 89 vendors were contacted during this time, including the 24 vendors that were included in the horizontal Magic Quadrant and the vendors that were mentioned as others to consider in the Magic Quadrant, plus additional vendors that are known to service the insurance industry. From this review, it was determined that there are three submarkets for BI and analytics servicing the insurance market: horizontal solutions vendors, vendors with industry accelerators and vertical/niche vendors focused on insurance.

Horizontal solutions: The study found that of the vendors placed and mentioned in the Magic Quadrant, the majority of vendors were horizontal in nature with no focus, dedicated team or solution targeted specifically at P&C and life insurance. They offered no industry content, nor did they have R&D teams focused on this industry. While some could cite insurance customers, it was opportunistic. Solutions generally were built for the power user, required heavy statistical and technology training and supported heavy-duty analysis (more in-depth, powerful and granular analysis than the niche solutions). These solutions are often used in the actuarial, marketing or finance department. Some solutions, however, especially those from new market entrants, often offer modern and easier UIs, which allow business user use. Examples from the Magic Quadrant include Microsoft, Oracle, Pentaho and Pyramid Analytics, as well as BeyondCore, InetSoft, Jedox and SynerScope, which were listed in the report as others to consider.

As shown in the Magic Quadrant, visualization tools that are simpler for business user adoption are gaining traction in the insurance industry. These are built for nonstatistical users with advanced visualization tools to allow for improved usability. The adoption is growing at an accelerated pace as buying shifts away from power users to line-of-business decision makers. Examples include Qlik, which provides industry application templates and offers industry applications that customers can download in the Qlik Market, and Tableau, which provides templates that can be downloaded for implementation.

Vendors with industry accelerators: A few of the large, horizontal vendors have invested in building out industry accelerators that are used to jump-start implementations. The base solutions are typically the same for all industries; however, the industry accelerators often include data models, dashboards, model libraries or report libraries. Insurers can use these to view common industry content to use as a platform to build out a custom solution during implementation (often with professional services involvement). Some offer the industry content free; others may charge for this content based on the client relationship. Examples include Information Builders, IBM, SAP and SAS.

Vertical/niche vendors focused on insurance: There is a submarket that has grown to target specific industry needs. One portion is the emerging P&C BI market, which is tackling the unique needs of this industry segment. These solutions are often closely tied to core transaction systems, come with in-depth industry content and support industry data models, as well as have a keen understanding of the modeling and third-party data requirements for this line of business. There are also vendors that provide industry BI solutions for both life and P&C in the market, each providing some type of off-the-shelf content (including cubes for insurance business processes such as policy management, underwriting and claims). Additionally, there is a growing market of advanced analytics tools built for insurance, which offer buyers great value in assessing things like underwriting and fraud risks. Example vendors included in this category, which are not included in the Magic Quadrant, are:

Earnix for risk modeling and pricing analytics

SpatialKey for geospatial, underwriting and exposure analytics for P&C insurance

Valen Analytics for underwriting analytics

4Sight Business Intelligence, Comarch, Cover-All, Guidewire, InEdge, Innovation Group, InsFocus Systems, Insurity, Policy Administration Solutions and Yodil for P&C BI/analytical solutions

EagleEye Analytics, Syntel and SNL iPartners for BI/analytics for both P&C and life insurance

LexisNexis and Verisk Analytics, which provide a range of analytics and analytical services for multiple lines of business and industry processes (marketing, underwriting, and claims, for example)

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